

THE UNIVERSITY OF CALGARY

**The Promise of One-On-One Literacy Intervention
With a Limited Literacy Middle School Student**

by

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ABSTRACT

This thesis presents the results of a ten week qualitative, case study. The case study follows the journey of a limited literacy, grade six student named Rusty as he progresses through a ten week, one-on-one intensive literacy intervention. A limited literacy student is defined as a student who has been identified as functioning two or more years behind his peers in literacy areas; primarily reading and writing. This paper focuses mainly on changes in reading behaviors, specifically in relation to word recognition and decoding, comprehension and metacognition. The results of the research show that, through responsive, explicit and meaningful instruction targeted to meet the unique needs of the individual student, positive gains can be observed. These gains were observable not only in the student's reading, but also to some degree in his writing, spelling and attitude towards literacy learning.

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CHAPTER ONE: INTRODUCTION

History and Rationale For the Study

Adolescents deserve more support !

Carmelita K. Williams (1999)

International Reading Association President

This is a powerful and very important statement in today's schools. All too often the unique educational needs of adolescents are not being considered, or met in classrooms. Unfortunately, by not meeting the literacy demands of these students they are being set up for potential social and economic failure in later life (Crevola & Hill, 1998; Moats, 1998; Snow, Burns & Griffin, 1998).

As an elementary school teacher who was keenly interested in working with young children and early reading intervention I had never given much thought to what was occurring in grade 5 or 6 classrooms and beyond. My focus was on students in grades 1-4 and, even as a beginning graduate student, I believed my graduate work would be completed with students at these grade levels.

My thinking was drastically changed one day while attending a Calgary Board of Education, Early Literacy Workshop. As a Literacy Lead teacher for my school I had the opportunity to attend a variety of professional development workshops related to improving literacy practices in the classroom. The workshops were part of the Early Literacy Initiative. At one of the sessions, Miriam Trehearne, Early Literacy Specialist, shared the following information with the group. She reported that if students have not developed basic literacy skills by the end of grade three that there is not much hope for remediation or success as they progress through the rest of their school years (Early Literacy Workshop, 1996).

Initially this information did not have much impact on my thinking. However, once I returned to my classroom and resumed working with my students, all underachieving readers in grades 4, 5 and 6, this comment kept popping up in my mind. It began to challenge my thinking. If the comment was true then my daily work

with these students was going to be ineffective. Yet, I felt it was effective. Slowly, over time, this statement shifted my thinking and my research direction from early literacy to adolescent literacy at the middle school level. My particular focus became successful interventions for limited literacy, middle school students. I wanted to make a difference for the students with whom I worked.

Related Research

As I began to read more about adolescent literacy it became clear that there is a recognized crisis in middle school education (Minnick-Santa, 1999). Adolescents *are* being short changed by public education when it comes to their literacy needs. They receive limited funding, do not get much attention in the literature and their needs are not a priority with policy makers or schools (Minnick-Santa, 1999; Moore, Bean, Birdyshaw & Rycik, 1999). In response to this, the International Reading Association created the Commission on Adolescent Literacy, or CAL, in 1997. The commission was created to review the policies and practices that impact adolescent literacy learning (Moje, Young, Readance & Moore, 2000). By 1999 a Position Statement on Adolescent Literacy had been developed and approved by the International Reading Association. In reviewing the position statement Elkins and Luke (1999) comment that the position statement recognizes the diversity of adolescent literacy and how adolescents' everyday lives are changing in ways in which many of us working in the educational field have not fully come to grips (p. 212).

The position statement looked at the needs and rights of adolescent learners in today's schools and made recommendations for supporting their literacy needs. Some of the recommendations include access to a variety of reading materials that students can and want to read, instruction that builds the skills and desire to read increasingly difficult material, assessment that shows students both their learning strengths and needs (as well as informing teachers about individual needs), the need for explicit instruction in reading strategies across the curriculum, the need for

reading specialists in schools to support students and teachers and an increased understanding by teachers, parents and community about the unique and changing needs of adolescent learners (Moore et al., 1999). This focus on adolescent literacy has brought significant attention to adolescent literacy needs. In the course of one year this topic has changed from a “not hot” to a “hot” topic according to a survey by Cassidy and Cassidy (2001) in *Reading Today*. While the Adolescent Literacy Position Statement is a step in the right direction, at this point it only addresses larger issues with middle and high school students. There is still a need to look more specifically at the needs of limited literacy students (Moje et al., 2000). Educators need to look more carefully and critically, at the needs of middle school students that, for whatever reason, continue to struggle with literacy tasks.

The elementary years, grades 1-3, are traditionally when children are expected to develop the literacy skills they need to take them through the rest of their school years. It is for these grades that teachers are best prepared to teach children to read. Unfortunately, not all students are successful with early literacy development. Recent studies show that in the United States approximately 30% of students move into fourth grade without basic competence in reading (Showers, Joyce, Scanlon & Schnaubelt, 1998). In Alberta, the Alberta Education Achievement Tests in Language Arts, provides a snapshot of the literacy skills of grade 3 students. In the 1999-2000 school year 93 % of the grade three population wrote the examinations. Of those students 90.7 % achieved scores within the acceptable standard on the combined reading and writing tests. When the test scores were examined separately 91.4 % scored in the acceptable range for writing, while 88.9 % scored in the acceptable range for reading (Alberta Learning, 2000). When isolated to examining grade three results only, the promise of literacy beyond grade three looks promising. However, a recent study done in Alberta with students, grades 4-12, found that one third of the students were limited literacy students, or what they termed as “overage beginning readers” (Joyce, Hrycauk & Calhoun, 2001, p. 42).

The Alberta and United States figures both demonstrate that there are students who begin their middle school years lacking the skills and strategies which enable them to make the transition from learning to read, to reading to learn. For many of them text is a jumbled, meaningless combination of letters and words of which they can make no meaning. These students end up struggling, feeling frustrated and yet they are faced with another six to nine years of formal education where literacy skills are critical to their success, not only in school but in the world beyond. What hope do these students have, especially when the chances of them receiving any remediation decreases with every year in school (Bergman & Schuder, 1993)?

While there is an awareness of the crisis in adolescent literacy there is not yet a lot of research that addresses one-on-one literacy intervention with these students. In recent research there are only two published articles pertaining to the issue. The first is Reading Rescue: Intervention for a Student at Promise (Lee & Neal, 1993). The second is, A Case Study of Middle School Reading Disability (Morris, Ervin & Conrad, 1996). Both articles discuss the success of a one-on-one instructional framework designed to develop literacy skills in limited literacy, middle school students.

These articles profiled two students, one in grade 6, and the other in grade 8, who had demonstrated significant delays in reading and writing. The design of both remedial programs was based on the instructional framework used with emergent readers by Marie Clay (1985). In both case studies the student demonstrated growth in oral reading, word recognition, spelling, comprehension and developed metacognitive strategies for reading following the one-on-one instruction.

The results of the two case studies are promising. They demonstrate that one-on-one intervention with older students can have a positive and significant impact on their literacy development. Lee and Neal (1993) made an important observation at the conclusion of their research. They said that until all students receive early intervention and disabled readers are anomalies rather than

commonalities in the upper grades, one-on-one reading intervention holds promise for limited literacy students (p. 282).

The issue of middle school literacy is just beginning to be addressed with success in some school districts. New Zealand has implemented the Supporting the At Risk Reader or SARR program in many of its schools (Oliver, 1999). The SARR program was piloted in Waikato schools in 1994. The program adapts Reading Recovery to meet the needs of older at-risk children. The goal of the program is to accelerate student reading and writing to a level of performance where they can participate independently in a group within the classroom.

In Alberta, both the Edmonton Public School Board and the Calgary Public School Board are investigating and implementing ways to better meet the needs of their limited literacy students. Another Alberta school board, the Northern Lights School District, appears to have had success with their program a Second Chance For Struggling Readers (Joyce et al., 2001). The program is based on the work of Showers, Joyce, Scanlon and Schnaubelt (1998) and their work with struggling readers at a high school in San Diego, California. The Northern Lights School District, Second Chance program is a multidimensional curriculum designed to address the literacy and learning needs of limited literacy students in grades 4-9. The students were selected through teacher recommendations and scores on standardized tests. The selected students attended a special 90 minute class, in lieu of elective courses, daily. Students were graduated from the program once they demonstrated that they were competent enough in reading to be able to successfully participate in the core subjects (p.43). The results from the program are promising with about 60 % of the participants showing gains of between 1.5 - 3.0 grade level equivalents during the year (p.45). The assessments used to measure growth were the vocabulary and comprehension sub-tests of the Canadian Test of Basic Skills.

The Later Literacy© Program (MacDonald, 1995), which is the framework used in this study, has not been published in the research journals. It is a program that I heard of 'through the grapevine'. The program was developed in

Scarborough, Ontario by Joyce MacDonald and her colleagues. The program is a one-on-one, short-term intervention designed for use with limited literacy, middle school students. The goal of the program is to engage students in literacy learning experiences in which they can acquire the necessary knowledge, attitudes and strategies to function as independent readers and writers (MacDonald, 1995). The program is just beginning to be popularized in Canada, and is currently being used at a variety of sites in six provinces in Canada (Personal Communication, 01/25/01).

Significance of Study

Literacy skills are critical for success in today's highly technological society (Moore et al., 1999; Reading Today, 1999; Snow et al., 1998; Spear-Swerling & Sternberg, 1998). The nature of literacy demands have not only changed, but also greatly increased over the years (Crevola & Hill, 1998; Gambrell & Anders Mazzoni, 1999). In today's marketplace people need to be more than merely literate in the traditional forms of literacy, reading and writing. Today adolescents are faced with the idea of multiple literacies and with that comes the expanded notion of what text is (Gordon, Sheridan & Paul, 1998; Moje et al., 2000). In fact in her article, Literacy in the Information Age, Rafferty (1998) says there are thirty eight different types of representative literacy currently identified in the United States. Literacy in the new millennium must take into account the technological advances that move beyond basic reading and writing (Canadian Teacher's Federation, 2001). For students to successfully compete in today's job market they must be able to read challenging material, use language to think, learn and communicate effectively, perform sophisticated mathematical and scientific calculations, solve problems independently and be technologically literate (Canadian Teacher's Federation, 2001; Moje et al., 2000).

Today the negative economic impact of not becoming a good reader and of not graduating from high school is more severe than they were twenty-five years

ago. Recognizing the importance of preparing all students, at all grades, to be fully literate is an important task for educators (Crevola & Hill, 1998; Gambrell & Anders Mazzoni, 1999; Moats, 1998; Snow et al., 1998). This new enthusiasm for middle school learners is positive and needed. It is evident from the current research on middle school literacy that there is a need to move beyond a level of awareness to a level of action. There is a need for continued and on-going research and program development in this area.

It is my hope that the results of this study will provide positive information about an intervention for use with limited literacy students. I hope that the results will inspire schools to investigate and make a commitment to such a program for students in their schools. The results may also be a positive addition to local, national and possibly international literature on a important and timely topic, adolescent literacy.

Theoretical Framework

The theory behind the Later Literacy© Program is consistent with current beliefs that literacy development is socially constructed, is a developmental process and is both a cognitive and affective activity (Forman & Cazden, 1994; Gordon et al., 1998; Irvin, 1998).

Literacy as a Socially Constructed Activity

In the past fifteen to twenty years there has been a theoretical shift in the understanding of reading/literacy development (Gaffney & Anderson, 2000; Gordon et al., 1998). Researchers and educators have shifted their beliefs based on Vygotsky's (Bruner, 1985; Forman & Cazden, 1994; Gordon et al.) research to view literacy learning as a socially constructed process. Learners learn from interactions with their environment, their peers and adults around them.

Vygotsky believed that cognition is socially created and that instruction is important to learning development (Forman & Cazden, 1994). He believed that

young children would learn about the world around them through experience and social interaction. Learners are able to increase their understanding and knowledge by first working through new experiences with an adult or more experienced peer. All learners have a range of what they are capable of accomplishing. This is known as the zone of proximal development. The zone of proximal development is the range of achievement between what a person is able to do independently and what he or she is able to complete with assistance and support from a more knowledgeable mediator. It is through this expert-novice mediation process with new learning that children would work through the problem with the cognitive and verbal support of the mediator. This mediation enables learners to initially construct meaning with support, then gradually move into a position of less support and ultimately to independence. Learning occurs as a joint construction of meaning (Gordon et al.). In education this process is referred to as scaffolding learning.

Literacy as a Developmental Process

Literacy development is *not* a natural process. It is a complex developmental challenge that is entwined with other developmental accomplishments such as memory, attention, language and motivation (Adams, 1990; D'Arcangelo, 1999; Mizokawa & Hansen-Krening, 2000; Reid Lyon, 1998; Snow, et al., 1998). In addition other factors such as home literacy environment, parental literacy skills, first language, socioeconomic status, cultural background and quality of beginning reading instruction also have a significant impact on a child's literacy development (Snow et al.; Spear-Swerling & Sternberg, 1998). Since literacy development is developmental that means students are going to reach developmental milestones at a different pace just as they do for learning to walk, talk and crawl (Spear-Swerling & Sternberg, 1998). Reading acquisition also progresses along a continuum with different needs and skills being required for reading at different levels and for different purposes. Even for students that learn to read by grade three the literacy demands of middle school are very different from

elementary school (Moore, Bean, Birdyshaw & Rycik, 1999). Middle school students need to continue to build and develop on the literacy strategies they have in order to help them with the new demands of content area reading. For teachers this means that in any grade there will be a wide range of reading abilities and that, as teachers, they need to be receptive to the needs of all students. In teaching this understanding has created a shift away from a transmission, or bottom-up model of teaching skills in isolation and in a prescribed sequence to a more holistic model of teaching.

Currently the trend in education is for a balanced program of literacy instruction. A balanced approach to literacy instruction is one which integrates skill instruction and practice within meaningful literacy contexts, has a balance between narrative and expository texts and balances the types of instruction from highly teacher directed and supported, to collaborative and independent student work. This is an important shift especially for students that are behind their peers in literacy learning. For these students literacy instruction has traditionally been isolated drill and practice activities that did not contribute to their academic improvement (Cunningham & Allington, 1994; Roller, 1996; Spear-Swerling & Sternberg, 1998) .

Literacy as a Cognitive and Affective Activity

To educators the concept of literacy learning as a cognitive activity is not a new one. However, many do not recognize the importance of literacy as an affective activity and the importance of affect in learning. Affect takes into account such factors as student motivation, attitude, perception, interest, emotions and associations related to past learning experiences, and feelings generated by words and events in the learning situation (Gordon, Sheridan & Paul, 1998; Irvin, 1998; Mizokawa & Hansen-Krening, 2000).

Affect is an important consideration when working with middle school students. The middle school years are often a time when students lose interest in reading and begin to develop negative attitudes towards reading (Worthy,

Moorman & Turner, 1999) . This change can be critical because at the same time desire and interest in reading are decreasing, the challenges, demands and nature of reading begin to increase (Ivey, 1999; Wilson, 1995). This problem is exacerbated for limited literacy, middle school students because these students tend to have more pronounced negative attitudes towards reading and literacy activities (Ivey, 1999). For these students literacy tasks are frustrating and laborious. Their initial and repeated failure brings about a cascade of negative consequences including lack of practice, loss of motivation and lowered levels of expectation by both the students and those that work with them (Spear-Swerling & Sternberg, 1998, p.131). Over time these students lose interest and are not motivated to read because of the negative experiences it gives them and they dislike and avoid involvement in literacy activities.

Methodological Framework

For this study I have decided to use qualitative research methodologies. I chose to do a qualitative study because the topic of one-on-one literacy interventions for limited literacy students is a topic that needs to be explored (Creswell, 1998). In addition, a qualitative approach is more appropriate when the research is studying individuals in their natural setting as a opposed to controlled or contrived settings that are often used in quantitative research. As a method qualitative research allows for a broader interpretation of the research findings because it provides the researcher with detailed descriptions of the activities, actions, reactions and interactions that happen when working with individuals (Patton, 1990). Also, collecting and analyzing data in this way enables the researcher to bring the reader into the setting and action that was observed as part of the research.

Use of a qualitative approach enables researchers to tell the tale of their journey from where it started to where it ends. While data is collected through the research process, chances are the journey towards the research question has started long before (Stake, 1995). It is like a story in that it allows for thick description of the

context and the interactions that take place during the research process. With qualitative research everything that occurs is data and the researcher is able to use this information to paint for the audience a very specific picture of the complexities and interactions of the individuals involved in the study (Patton, 1990).

Research Questions

I am interested in the basic literacy skills of limited literacy, middle school students, that is, their ability to read, write and communicate successfully with their peers and the world around them. A limited literacy student is a student that is identified as experiencing difficulties with literacy tasks and as functioning two or more grade levels behind peers. Limited literacy students are not slow learners; they have potential, but they are not yet working to their predicted potential.

The goal of my research was to complete an in-depth case study with one student to examine what impact a one-on-one literacy intervention may have on literacy skills. Since many reading intervention programs have shown success with younger readers, I needed to know the effect of the same type of program on older students.

My research questions are :

- 1) What impact will daily, 40 minute lessons for 10 weeks, one-on-one reading intervention program have on the literacy skills of a middle school, limited literacy student?
 - i) In reading, what demonstrated growth will the student show in fluency, decoding and word recognition?
 - ii) In reading, what demonstrated growth will the student show in comprehension?
 - iii) When reading, what demonstrated growth will the student show in awareness and use of metacognitive strategies?

Organization of the Thesis

Chapter two will examine the methodological framework of the study in more detail. The setting for the research program, the instructional framework for the daily lessons, procedures for data collection and an overview of data analysis will be presented. The chapters that follow will use the research questions as focal points to examine and discuss the student's growth over the course of the program. Chapter 3 will focus on fluency, and word recognition in reading; chapter 4 will focus on reading comprehension; chapter 5 on metacognitive development. Chapter 6 will be the discussion chapter. In this chapter the main research questions will be readdressed and implications for practice and further research will be discussed. The literature that has been reviewed will be interwoven throughout each of the chapters.

CHAPTER TWO: RESEARCH METHODOLOGY

The Case Study

I have chosen to do qualitative research in the form of a case study. Case studies are well-suited for research in educational settings, particularly when examining educational interventions or innovations (Lancy, 1993). Using a case study approach allowed me to closely examine, evaluate and report on the progress of one student in a very natural and non-threatening way.

As the researcher I am an active participant in the data collection since I am working with the student and not acting as a distant observer. Being able to work within the student's naturally occurring setting and being able to work with him on such a personal level enables the researcher to use descriptive detail to describe the research process. It also allows me to capture every nuance of voice, body, expression that may well be missed in a different type of study. This type of research is also important for the nature of this project since the interactions and responses between the teacher and the student are a critical part of the program. Working this closely on a daily basis with my student enabled me to get to know his learning needs and then to respond in a meaningful and directive way. My actions and reactions are as much a part of the study as the student's.

Another plus of the case study is that narrative accounts are often more user-friendly for educators to read and interpret than highly technical and statistical materials (Lancy, 1993). The more narrative style of a case study offers descriptions, observations and interpretations to which readers can relate.

The type of instructional program that is the basis for the research is part of the school's instructional program. Many teachers are trained in the program and students across all grade levels are involved in this program and other programs. As a result, the student in my research did not feel singled out from his classmates.

Context for the study

As a professional educator I had been involved, at the school level, with trying to develop a reading intervention program for the older, limited literacy students in our school. Research on the topic is limited, so we had to utilize what little information we found, and our own resources and experience to try to develop a program that would work.

We developed our framework using the work of Marie Clay in early intervention. In addition we used the information from two research articles where the authors had successfully adapted the Reading Recovery framework to be used with older students. As stated in Chapter One the first article was, "Reading Rescue: Intervention for a Student "at promise"" by Lee and Neal (1993) and the second was, "A Case Study of Middle School Reading Disability", by Morris, Ervin and Conrad (1996).

The staff had been trained in Early Reading Intervention and had used it with some students. However, as the teachers worked through the program it became evident that while older students needed to develop the same skills and strategies as younger students, they needed more age-appropriate methods and materials. Following this trial we decided to modify the framework for use with older students. The students showed progress and teachers were motivated to continue to try to develop the program even more. At about the same time we were introduced to the Later Literacy© Program (MacDonald, 1995), from Scarborough, Ontario. This program was completely funded by The Ministry of Human Resources in Ottawa as part of the Stay In School Project. The program had been developed by teachers in the Scarborough school system. Student results prompted the author, Joyce MacDonald, to write a guidebook for teachers and to begin training teachers in Scarborough in successful practices that result in accelerated learning as students move along the literacy continuum (Personal Communication, 01/25/ 01). The purpose of the program was to identify and remediate literacy problems in middle school students that were performing at least two years behind their peers.

An independent evaluation of the Later Literacy© Program was completed by Denyse Gregory (MacDonald, 1995), research consultant. Two types of evaluations were used to collect data on the program. The first involved having students, parents and teachers involved in the program complete questionnaires to determine their perceptions of the program. The second involved a comparison of the student's scores on entrance and exit testing (after 10 weeks) in reading, writing and spelling. The sample for the evaluation was twelve students.

The student responses (83.3%) indicated that students felt that their participation in the program had increased the average amount of time they spent reading at home to more than 20 minutes daily. Students (91.7%) also reported that the program had been very effective in enhancing the work they were doing in their classes. They also identified the daily home reading component of the program (33.3%) and learning about parts of words (33.3%) as the parts of the program that helped them the most.

The results from the parent and teacher questionnaires showed that there were positive changes in student behavior. Parents commented that their children were much more interested in reading and that children showed more motivation for completing homework (MacDonald, 1995, p.31). Teachers responded that graduates of the program were more actively involved in the classroom, were more willing to read aloud and answer questions in class, and that work habits in class and with homework had improved. Both parents and teachers also noticed improved performance in reading, writing and spelling.

The comparison of entrance and exit scores on sight words, word solving and a modified miscue analysis showed accelerated growth for the graduates. With sight words the entrance mean was 56.33% and at exit it was 70.92%. For word solving the entrance mean was 57.5 % and the exit was 87.08 %. The miscue analysis showed that students were able to successfully read text two or more levels above where they had started. The student's reading also showed improved fluency, monitoring and self-correction and the ability to retell what they had read. The

content and use of conventions in written summaries also improved over the ten weeks.

The independent evaluation of the Later Literacy© Program in Ontario supported the claims that students involved in the program would show accelerated progress over the course of the ten weeks. This growth was measurable through test scores and observable through student behavior and attitude change towards learning and literacy tasks.

The School

The school in which my study took place is a specialized setting for complex learners in grades two through nine. The school's focus is to provide short term, intensive literacy instruction to students enabling them to become more independent and successful learners. Since the school is a system site, the majority of the students are bussed from communities around the city.

Students are considered for placement in the program through a two-tiered process. First, students are referred to the program by their community schools in collaboration with a system specialist. Second, all referrals are reviewed through a screening process to identify possible candidates for the program. The school is on a modified year round calendar which allows for intake of new students throughout the year. Optimally students are in the program for a maximum of two years; then they are transitioned to their community schools.

There are two full-time administrators, 17 full-time teachers and a half time physical education teacher on staff. The student population is 135. The school is organized into five learning teams with a pupil teacher ratio of 9:1. With the main focus being developing literacy skills, the school is organized in a way that maximizes instructional time and the curriculum is taught in an integrated manner. Subjects are not compartmentalized except for math and physical education.

The Student

The student in the research, Rusty, was referred to me for the study by staff at the school. The staff were familiar with the criteria for participant selection and had identified him as a candidate for the Later Literacy© Program. The initial criteria for selection established in the pilot project was for students to have the potential to take full advantage of the opportunities provided, to be committed to literacy skills and to want to be included in the program (MacDonald, 1995, p.13). This criteria were further modified to address the unique needs of the student population at the school and try and insure appropriate selection of candidates. Other criteria that were added was that the student be of average cognitive ability, particularly in the verbal domain, have age-appropriate listening comprehension, have good attendance and not have medical conditions that may impact the instruction addressed (e.g., undiagnosed or untreated Attention Deficit Disorder).

Rusty is an 11 year old, male student in grade 6. He is in his second year of the program. A review of Rusty's cumulative school file showed that he experienced difficulty with early literacy tasks such as reading, writing and spelling since grade one. He has not repeated a grade although this was recommended in grade one. During his grade two year, he was diagnosed as having attention deficit disorder and was put on medication. According to his parents and teacher he responded favorably to the medication. Rusty has continued to take medication for attention concerns. While Rusty continued to struggle academically he was not put on an Individualized Program Plan until he was in grade four. It was also during this year that he was referred to the program in our school.

Rusty had shown progress in his first year at the school. In reading his ability to comprehend text improved from an instructional grade four to an instructional grade five reading level. It was noted that this score was for comprehension only. Word recognition for the passage was at a frustration level. Improvements were also noted in the areas of spelling and written expression. He was considered an

enthusiastic and positive student who was motivated to improve his academic abilities. He was also fortunate to have very concerned and supportive parents.

The Class

Rusty's team is made up of 26, grade 4, 5, and 6 students. There are three full-time teachers on the team. One of the teaching assignments is a job-share with one teacher working mornings and the other afternoons. In addition, the team also works with a literacy support teacher for one hour each day and has a classroom aide for 75 minutes, Monday through Thursday.

Rusty's team had a very positive and congenial atmosphere to it. In the mornings the students are greeted in the halls and as they enter the classroom by their teachers. Once inside there is a daily schedule posted on the board so the students can see what is planned for the day. As students arrive in class they settle into organizing themselves for the day. Homework is handed in, some students head off to do jobs such as change the calendar or take attendance. Students without a morning task would be reading at their desks until morning announcements. The students appear to know and be comfortable with the routines within the class.

The instruction within the class was varied depending on the instructional focus. Throughout the day students would work in small groups. Some were homogeneous groupings such as those for guided reading and mathematics and others were heterogeneous groupings such as work in curriculum areas such as science and social studies and responsibility groups. Responsibility group time is when a group of nine students works with their responsibility teacher. A responsibility teacher is the main contact and Individualized Program Plan coordinator for a student.

Another benefit of being organized as a team is having the opportunity to work one-on-one with students. The team had organized their timetable so that each teacher and the classroom aide had time to work one-on-one with students.

The Instructional Framework for the Program

As mentioned earlier, the instructional framework for the Later Literacy© Program was designed by Joyce MacDonald and her colleagues at the English Language Centre in Scarborough, Ontario. The program is based on research data and is designed specifically for use with middle school students that are significantly behind their peers, two or more years, in literacy learning. In order for teachers to be able to work with the program and receive the teaching materials, they must participate in a three day training and practice session. The training sessions cover theory for all components of the program, instructional application and assessment.

The program is designed to be a one-on-one tutoring program with a trained teacher and a suitably identified student. Together the tutor and student work through 45-50, forty minute lessons. Entrance and exit testing is done with students to measure progress.

The lessons are structured to include approximately ten minutes of each of the following components:

- 1) Familiar reading of narrative texts,
- 2) Word work: Areas of specified need as identified in assessment, pronounceable units/phonemes and affixes,
- 3) Reading of expository text connected to an area of curriculum, study, and
- 4) Guided writing related to the expository reading.

There is also an expectation that the student reads silently at home for 25 minutes each night. The home reading is followed up the next day as part one of the lesson.

Assessment is a critical part of the program for two reasons. First, it establishes each student's reading level and the strengths and weaknesses at the beginning and end of the program. Second, assessment is an integral part of daily lessons that helps direct future instruction. Assessment in the program takes many

forms from testing results, to anecdotal notes, to daily observations and responses to student behavior. The goal is to develop responsive and explicit teaching that establishes a direct connection between the assessment data and the teacher's immediate instruction and future instructional plans (Rhodes & Dudley-Marling, 1996). This is critical to explicit and strategic teaching. It is important that students not be taught what they already know. A well-informed teacher will start where a student is at and move forward from there (Clay, 1985; Spiegel, 1995; Wuthrick, 1990).

What Makes Later Literacy Work?

The Later Literacy© Program is a program that was designed with the unique needs of limited literacy, middle school students in mind. The program focuses on teaching strategies for reading and writing. The program recognizes the importance of working with content area materials as well as the more familiar narrative texts (Irvin, 1998; Roller, 1996; Snow, Burns & Griffin, 1998; Spear-Swerling & Sternberg, 1998). Reading and writing in the content areas is given the same amount of instructional time as the work with narrative text. In addition to addressing the unique literacy needs of the middle school student there are important instructional features built into the program. These include one-on-one individualized instruction, explicit teaching in context and scaffolded learning. These three features are beneficial in the instruction of limited literacy students (Irvin, 1998; Joyce, Hrycauk & Calhoun, 2001; Snow, Burns & Griffin, 1998; Wilkinson, 1999).

The Benefit of One-on-One

The program is targeted to reach students in middle grades that are lagging significantly behind their peers in basic literacy development. For these students a one-on-one approach is the most direct way to impact change. The program is time specific (40-50 lessons). This makes it critical for the teacher to be able to identify and intervene quickly and specifically with students. This is best done in a one-on-one setting. Research from Reading Recovery and other early intervention

programs has shown that one-on-one interventions are the most effective way of positively impacting student's literacy development particularly for those experiencing reading problems (Crevola & Hill, 1998; Pinnell, 1994; Roller, 1996). Working in a one-on-one setting with a student can be powerful because it allows the teacher to be immediately responsive providing effective, direct literacy instruction (Roller, 1996).

The Benefit of Explicit Teaching

Another benefit of a one-on-one program is that it allows for explicit teaching and individualized strategy instruction in all areas of the literacy program (Roller, 1996; Spear-Swerling & Sternberg, 1998). Explicit teaching of strategy use has been shown to be effective for use with students who struggle with literacy tasks (Snow, Burns & Griffin, 1998; Wilkinson, 1999). Wilkinson provided a clear description of explicit teaching when she said that, "The explicit teaching of reading is about making the hidden obvious; about exposing and explaining what is taken for granted" (1999, p.7). For students who are struggling with literacy processes it is important that nothing be taken for granted with them. It is imperative for the tutor to know what they know and make that which is unknown clear. Explicit teaching is not telling the student something. The learning must go beyond this to a level where the student is consciously able to focus on part of the whole and then develop the ability to talk and think about that part on a metalevel (Wilkinson, 1999).

Explicit teaching of strategies is important for struggling students (Ellis & Larkin, 1998; Moats, 1998; Snow et al., 1999; Wilson, 1995). Strategies are not synonymous with skills. Skills are the subdivided components of a task (Paris, Lipson & Wixson, 1994). In reading skills would include such tasks as sound-symbol recognition, decoding, sight vocabulary and using a dictionary. Strategies are procedures used to solve a problem; reading is a problem solving process and successful readers need to have a repertoire of strategies to figure things out (Pikulski, 1994). Students need to be faced with real problems in reading and writing

and then provided with the tools to solve the problem. It is important that the learning take place while the student is engaged in meaningful literacy activities (Allington, 1996; Roller, 1996; Snow et al., 1998; Wilkinson, 1999). During the lessons the tutor observes and directly responds to student learning making note of skills that need to be addressed (sight vocabulary, phonograms, orthographic features, conventions, text structure), or provides immediate redirection and feedback. Specifics the student needs to learn can then be addressed and practiced immediately. Feedback is important because students need to have reinforcement on their choice and execution of strategies if they are to realize that strategy use is effective. Without this feedback there will be little motivation to continue to use them outside the tutorial (Spear-Swerling & Sternberg, 1998; Spiegel, 1999).

The Benefit of Scaffolded Instruction

Scaffolding is also an important part of this program. The notion of scaffolding was developed out of the research of Vygotsky. Scaffolding works with the explicit teaching of strategies to provide an empowering learning experience for the student. All learners operate within a zone of proximal development with learning. This zone is the difference between what tasks a person is able to complete independently and what he or she is able to complete with support and mediation from a more experienced person (Beed, Hawkins & Roller, 1991; Bruner, 1985; Gordon et al., 1998). The support provided by an adult or peer is the scaffold which supports the student and helps them learn. Gradually over time and with practice the child would be able to complete the task independently.

Scaffolded learning with literacy tasks works in the same way by providing a continuum of support to encourage students' learning and move them from a position of dependence, or not knowing, to a position of independence. The teacher's or peer's responsibility is to know the student well, to determine areas of need, make the learning explicit and clear, then work with the student to develop independent application.

This gradual release of responsibility from the teacher to the student has three phases: teacher modeling and demonstration, collaboration with the student and independent student responsibility for the task (Gambrell & Anders Mazzoni, 1999). The phases progress from total teacher control to student control and independence. At this end the student is able to apply the new learning independently in a variety of situations and will have internalized what was taught.

In the first phase, teacher modeling and demonstration, the teacher has full control. The information being taught to the student is new and there is a need for explicit teaching. The teacher will draw the student's attention to what needs to be learned, will model and verbalize what and why it is being done. Since it may be the student's first encounter with the new information he or she is an observer. The student watches and listens to become familiar. The lesson operates at this level until the teacher feels the student is able to assume more responsibility.

In the collaboration phase the student gradually begins to be involved and assume more responsibility. Once the student has become familiar with a strategy the teacher will invite the student to participate. The level of teacher support is still high but the student feels comfortable helping to solve the problem. From this they work together towards reducing the level of teacher support. Gradually the teacher will be able to cue students to specific elements of a strategy, then to specific strategies and finally to only using a general cue to direct student thinking (Beed, Hawkins & Roller, 1991).

In the final phase the student has internalized and is independent with using the strategy. The student may occasionally require a teacher prompt but once he is pointed in the right direction he knows what to do.

This type of support is critical for limited literacy students who may require repeated encounters with new learning before it becomes automatic. These students benefit from direct instruction, think aloud, teacher modeling and specific feedback related to performance. Working together with the student helps them develop the confidence they need in their learning so they are willing to take the risk

to apply new learning independently. Also the use of scaffolding makes learning explicit and addresses it at a conscious level for the student. The use of scaffolded instruction is like a bridge that helps make strategy learning useful and meaningful to students because they learn how and when to apply a wide variety of strategies with independence and success (Irvin, 1996; Roller, 1996; Spiegel, 1999).

Data Collection

The active research component of this project was completed over a ten week period from August 22 - November, 10, 2000. This component was to include entrance and exit testing and the completion of 50 lessons with the participant, Rusty. This time line also accounted for the school's fall break from October 7-25, 2000. The actual end date for the research was November 23, 2000. The time was extended to get as close as possible to the target of 50 instructional lessons. Over the course of the research there were some days where lessons had to be postponed or canceled because of late buses, field trips, illness, special presentations or assemblies. The total number of instructional lessons completed was 43.

The data for the project were collected using audio taped interviews with Rusty and his parents, both formal and informal testing, daily lesson sheets, audiotapes of testing and daily lessons, classroom observations and researcher field notes.

Interviews were used with Rusty's parents to gather information on their perceptions about his literacy skills before we started the program and upon completion. Rusty, too, was interviewed before we started the lessons, then again following lesson 10, 25 and 43. These interviews were audio taped to provide a more accurate account of what was said.

The lessons were audio taped to more accurately capture the interaction between the tutor and the student. Without this component many significant pieces of conversation may have been missed. Also, there was not enough time during the

40 minute lesson for the researcher to stop and make detailed notes; the focus needed to be on the student and his literacy processes. Following, the sessions with Rusty, the researcher then listened to the audiotapes and made field notes. Field notes were kept for the classroom observations, interviews, researcher reflection, and the audiotapes.

In order to contextualize the one-on-one program (which was the focus of the research) within the regular class program, four informal class observations were completed. The observations were completed on November 1, 8, 14 and 22, 2000. The purpose of the observations was to contextualize the learning and literacy environment the student operates in on a daily basis. Each observation was 30-50 minutes in length depending on the lesson being observed. Observations were completed for large groups and small homogeneous and heterogeneous groups. Through the observations class organization, atmosphere, class management, teaching focus, strategy teaching, curriculum and student interaction and behavior were observed. A checklist of guiding questions (See Appendix A & Appendix B) was designed to direct thoughts and observations across the various activities that might be observed. However, the checklist did not constrain the researcher from making additional comments as the observations evolved. All observations were recorded in the form of field notes and are confidential.

As reported earlier, testing and daily ongoing assessment are critical components of the program. The entrance testing provides benchmark scores and reveals the strengths, weaknesses and strategies the student already brings to the literacy process. Daily observations provide a window into the student's thinking and give the tutor direct feedback and information on how to structure future lessons. For the entrance testing the student is given a series of formal and informal tests to establish literacy strengths and weaknesses. The tests assess reading level, phonemic awareness, word recognition, decoding, fluency, comprehension, monitoring, metacognition, written expression and spelling.

One of the tests, a standardized test used for entrance and exit testing, was the Jerry John's Informal Reading Inventory (1997). This inventory was selected because it is a well-known standardized test and will be useful as a comparison with the tests designed for specific use in the program. The informal reading assessment from this test was also used as the basis for the oral retelling and written summary as part of the testing protocol of the Later Literacy© Program.

The other informal tests (1-7) administered are tests that were developed exclusively for use with the Later Literacy© Program. These tests were designed, piloted and normed by Joyce MacDonald and her colleagues at the English Language Centre in Scarborough, Ontario (Personal Communication, 01/25/01).

- 1) Miscue Inventory and Analysis - This test extends the scores from the Jerry John's Informal Reading Inventory and provides qualitative scores for oral reading fluency, retelling and summary writing.
- 2) Word Identification - Don Word Test (1995)
- 3) Spelling - Don Spelling Test (1995)
- 4) Appellations (1995) - A list of fictitious names is read by the student to assess phonemic strengths and areas of weakness.
- 5) Nonsense Words (1995) - This is a written test that examines a student's ability to encode onsets and rimes.
- 6) Root Words and Affixes (1995) - The student reads aloud a list of derivatives, words derived from root words.
- 7) Word Solving (1995) - The student is asked to spell words from root words that are provided.
- 8) Cloze - The student silently reads a piece of text where key words have been left out. This task assesses how well students use context, surrounding text, to make meaning in a passage. The Alberta Diagnostic Reading Program (1994) was used for the cloze passage.

In the program, not all of the tests are re-administered at the end of the sessions. The Jerry John's Informal Reading Inventory, the Miscue Inventory and Analysis, the Don Word Test, the Don Spelling Test and Root Words and Affixes Test were the only exit tests re-administered. Each of these tests were administered to Rusty at the end of the sessions. The reason for more entrance tests is to gather specific information about how the student processes information and what strategies he applies in solving literacy problems. The information that is obtained from these entrance tests is used to develop the student's individual 1-50 list. The 1-50 list consists of targeted spelling words, high frequency words, affixes, phonemes and other conventions with which the students have not demonstrated accuracy or fluency. In each daily lesson the word work part of the lesson is started by addressing one of the topics from the 1-50 list. From the entrance testing, specific information is gained for direct instruction.

For this study the student was also asked to complete the Metacognitive Strategies Index(See Appendix C)(Cassidy Schmitt, 1990). I wanted to have something more formal than my observations and interview notes to evaluate the presence and growth of metacognitive strategies.

As part of the daily lessons, the teacher completes a daily plan to prepare for each lesson. The daily plans have space on them for each segment of the lesson. In addition to planning space, there are also checklists to note what types of strategies the student is using unprompted. There is also a teaching page that is used for running records and as a space for the student to use to work things out. These lessons and the teaching page will provide a snap shot of what happened in each daily lesson. The teaching pad is also a place where specific observations about Rusty's behavior were recorded. These observations could then be reviewed or taught to in upcoming lessons.

As a back up and extension to the daily plans all lessons were audio taped. Following the daily lesson I would listen to the tapes and write field notes of the

interaction that was heard. Rather than just transcribing the conversations, the field notes add in researcher comments, questions and reflections.

Data Analysis

Data analysis can be considered one of the more challenging aspects of case study research because of the enormous amounts of data that is collected over a variety of sources (Creswell, 1998; Gall, Borg & Gall, 1996). In this case study, testing results, interviews, daily lessons, recordings of lessons, and artifacts were examined to document the progress of the subject. While this is a qualitative study and the results will be analyzed and reported qualitatively, there will be some use of quantitative analysis for testing results as usual for one-on-one intervention. The results of some of the tests will be reported numerically. The changes in the test results will be contextualized with qualitative evidence from other data sources.

In analyzing the data the first step was to review all the data collected to get an overall sense of what was there (Creswell, 1998; Stake, 1995). From here I went back to the original research questions to look for categories for specific analysis. Once the categories were determined I went through the data again to analyze and assign significant pieces to categories.

In the process of analyzing the data I discovered that many of the categories were interrelated and it would be difficult and redundant to address them all separately. This led to a reworking of some of the questions to make the analysis and interpretation more coherent. For example rather than discuss word recognition, decoding and fluency all as separate processes I decided it would be better to discuss word recognition and decoding as components of oral reading fluency because it would have been difficult to separate the three since the first two are essential to developing fluency.

Once the data have been reviewed and organized, the results of each section (reading fluency, reading comprehension, metacognition) will be discussed. The results from the data will be combined with description from the researcher's

field notes and relevant literature to paint a portrait of Rusty's literacy growth over the ten weeks.

Researcher Bias

Researcher bias can be a problem in qualitative research. Therefore, it is something that needs to be addressed to help ensure objectivity in the paper (Creswell, 1998; Lancy, 1993; Stake, 1995). When initially faced with this concept, and the nature of my research, I thought there would be no bias. However, as a strong advocate and trained facilitator of the program, I realized I have preconceived notions about the impact and benefit this program has on students. Having experienced significant success with other students, I had the same high hopes for my work with Rusty.

As I reviewed audiotapes of lessons and my own reflective field notes, I found that I was very concerned about Rusty's progress, or lack of it. In reflection I think this concern about lack of progress served to make me a better teacher because it made me review the goals of the program, the needs of my student and it made me refocus in the areas of need. I had to remind myself that while the program is excellent, the daily time is limited and that I would not be able to remediate all the areas with which Rusty needed help; nor might I be able to turn him into "super" reader.

This reflection and refocusing on my part helped to target his specific needs in every lesson and at the end of the ten weeks, there was progress; not what I had experienced with previous students, but important and significant improvements for Rusty.

CHAPTER THREE: FLUENCY AND WORD RECOGNITION

This chapter is going to introduce you to Rusty and his journey and progress through a ten week, intensive literacy program. While Rusty did bring some strengths and strategies to the reading process, he was in need of assistance to help him bridge the gap between what he knew and what he needed to know to become a more successful reader. The assessment that was completed prior to starting lessons indicated that oral reading fluency and word recognition were target areas for remediation.

Reading is a complex, developmental process. The act of reading itself involves many different processes: letter recognition, sound symbol relationships, word recognition, decoding, fluency, understanding of punctuation, word meanings, text structure and overall comprehension of what has been read. All of these components are so interconnected that a breakdown in one of these areas can lead to failure and frustration. The interconnectedness (Adams, 1990) of these processes makes it difficult to pull out and discuss just one area because change or growth in that area will impact other areas. This is the case with fluency, word recognition and decoding. While it can be difficult to discuss one independent of the other, that is what will be done here. First of all this chapter will discuss fluency in oral reading. This will be followed by an examination of word recognition and decoding in reading. Finally the chapter will examine the impact that any changes in reading may have on the writing process, particularly as it relates to spelling.

Fluency

Oral reading fluency is a component of reading that does not always get the instructional attention it deserves (Klenk & Kibby, 2000). However, while it may not appear to get the attention it deserves, the two components that have a significant impact on fluency, decoding and word recognition, are given significant instructional time in regular classes and as part of remedial or intervention programs.

Klenk and Kibby (2000) identify fluency as reading smoothly, without hesitation, and with comprehension. For limited literacy students fluency, or the lack of fluency, in their reading can be a major problem. These students often have a limited sight vocabulary and are slow decoders as a result of limited phonemic awareness. For these students it is important to develop fluency in reading because without it, everything else involved in the reading process is negatively impacted (Klenk & Kibby; Reid Lyon, 1998). Helping these students to develop their decoding and word recognition skills will improve their reading fluency and other aspects of their reading over time.

At the beginning of our tutorials Rusty demonstrated confidence in his oral reading abilities. I had him read the grade five passage, *The Mystery*, from the Jerry John's Informal Reading Inventory (1997). He read in a loud, clear voice and observed most punctuation marks that occurred in the text. His reading of text was mostly phrase reading, usually in 3 - 4 word chunks, with some intermittent word by word reading. He was able to read several words in the passage quickly and without decoding. For words he did not know he made a quick guess based on the initial letter of the word and kept on going, for example: wizard for whizzed, club for curb, side for slide, and snake for skate. I got the impression that when he knew a word, he knew it; and if he didn't, that he did not have the awareness or the strategies to figure it out. Words such as mystery, library and disappear were read quickly without hesitation or analysis. There was little evidence of strategy use and no monitoring or self-correcting. It was almost as if his goal for reading was to read through the passage quickly. Using the Holistic Rating Scale for Oral Reading Fluency (Appendix D)(MacDonald, 1995), he was assessed to be working at the lowest level, level one.

The Holistic Rating Scale for Oral Reading Fluency (Appendix D) was designed to measure student fluency. It is a qualitative rubric that contains seven ratings for oral fluency. Each rating has a set of descriptors to help describe the student's reading behavior. The descriptors look at three components: strategy use,

recognition of familiar words and language structures and self monitoring behavior.

A level one reader is described as: A reader who demonstrates a minimal grasp of reading strategies and a very limited range of familiar words and language structures. Miscues that seriously affect meaning and structure occur frequently (MacDonald, 1995).

It is already known that the size and range of a student's sight vocabulary and the ability to decode words quickly improves reading fluency (Adams, 1992; Rasinski, 2000; Samuels, Schermer & Reinking, 1992). In addition to focusing on improving these, there are other parts of the literacy program that will help foster fluency while the other two develop. These include having students read, and read books at a just right level, direct teaching of features of text that impact fluency, listening to fluent readers so they hear what it sounds like and reading easy books to younger peers to practice their own oral reading fluency. To address fluency in the lessons, the two components that were part of every lesson were reading just right books and direct instruction of text features. Modeling of fluent reading occurred each time a new novel was introduced to Rusty. To introduce the novel and activate background knowledge, the first chapter of each book was read to the student by the teacher.

There is research to show that having students read material at a just right or instructional level will help improve fluency, word recognition and confidence in reading (Adams, 1992; Allington & Cunningham, 1996; Snow et al., 1998). Research demonstrates that where the goal is to boost children's overall reading achievement, it is in fact best accomplished by engaging them with materials that are well beneath their frustration level (Adams, 1992). A student's instructional level is determined as text he can read with 95 % or higher accuracy in word recognition and comprehension. While most teachers recognize and respond to this with young readers, it is important to make sure that this same emphasis is maintained for middle school students whether or not they are experiencing problems.

The program encourages daily reading at the student's level with both narrative and expository texts. The student reads 25 minutes of narrative text independently at home. The expository texts are addressed as part of the daily lesson. They are at the student's instructional level and are worked through using scaffolded learning. New vocabulary and important concepts are discussed prior to reading. The text is also broken down and read in smaller pieces so understanding can be monitored.

The program actively engages students in the reading process. They read approximately 20 minutes a day per lesson and then for a minimum of 25 minutes per night. Over the course of ten weeks this adds up to 1250 minutes of independent reading and that does not include weekends! This engagement in reading is important since many poor readers do not get the consistent, in context, practice in reading they need to help them improve (Adams, 1992; Joyce et al., 2001; Moore et al., 1999; Reid Lyon, 1998; Rhodes & Dudley-Marling, 1996).

Rusty successfully read a number of novels at the grade three to five reading level. Every day the lesson would start with Rusty reading me one page from his reading the night before. Rusty enjoyed working on his fluency and presentation of his oral reading. He would sometimes practice at home the page he was going to read to me the next day so he would sound like an expert reader.

As he read I would listen and observe for reading behaviors on which I could praise him as well as text features we could learn about. Some of the text features we learned about included intonation for question and explanation marks, use of italics and bolded print in a sentence, pausing for commas, and the use of expression to make yourself sound like a expert reader.

As we worked through the lessons fluency was an area where I tried to give Rusty daily feedback about his specific improvements. I found that his fluency improved when he tracked the text he read. By the twelfth lesson he was improving his ability to recognize and read more punctuation such as commas in text (Lesson, 09/19/ 00). By early October he was reading longer strands of text with appropriate

pauses and starting to use expression (Lesson, 10/ 6/ 00). From this point on fluency was consistently improved by his ability to use strategies such as scanning ahead (Lessons, 09/ 25/ 00; 10/ 27/ 00), rereading; his ability to read larger words such as administrator and comfortable in text (Lessons, 11/ 00); and, his ability to use expression for emphasis or meaning (Lessons, 10/ 30/ 00; 11/ 07/ 00).

At the completion of the program Rusty's fluency was rated as a four on the Holistic Rating Scale for Oral Reading Fluency (Appendix D). A level four reader is described as demonstrating a competent grasp of reading strategies and fairly extensive range of familiar words, language structures and commonly used figurative language. Many successful attempts are made to correct miscues that do not match context or syntax (MacDonald, 1995).

Rusty had progressed to the point of being aware of strategies in reading and being able to use them with some independence. He was able to recognize when the text stopped making sense or when a prediction he had made did not sound right. He would stop and work out big words in text and was beginning to do some cross checking. He was able to read with expression and with observing all punctuation in text. He read the exit testing passage with 98 % accuracy. I felt he had developed accuracy and internalized what it was to be a fluent reader.

Two factors (that were improved through instruction) which significantly contributed to the improvement in fluency were his word recognition (instant recognition of words) and decoding skills (use of strategies to work out a word). The most significant change was with his awareness of and ability to successfully work out 'big words'. He had progressed from a student that had been completely baffled and afraid of what he called 'big words' to a student who was willing and able to work these words out.

Word Recognition and Decoding

Word recognition and decoding are two important skills needed in successful reading. They have also been identified as skills that are lacking with reading

disabled students (Spear-Swerling & Sternberg, 1998). Like many other aspects of the reading process word recognition and decoding are very closely connected. A child's ability to decode words quickly and accurately increases the speed and accuracy of word recognition and automatic word recognition reduces the need for decoding. Since these two factors are so difficult to effectively separate they will be discussed together.

Decoding is the component of reading that opens the way to reading words independently and successfully. It is a necessary skill if students are expected to become independent word learners and independent readers (Stahl, Duffy-Hester & Dougherty Stahl, 1998). Two components that support a child in learning to decode words are phonological awareness and phonemic awareness. These two components of learning to read are so important that Adams (1992) stated that, "The insights that researchers have given us about the nature and role of phonemic awareness and on methods for developing it may well be the most important pedagogical breakthrough of this century." (p. 63). The development of solid phonological and phonemic awareness has been determined to be an indicator of reading success in early grades and beyond (Goswami, 2000; Reid Lyon, 1998).

Phonological awareness and phonemic awareness are often used interchangeably, but there is a difference in their meaning. Phonological awareness is a general term that refers to the appreciation that sounds of speech are distinct from their meaning. Phonemic awareness is the insight that every spoken word can be conceived as a sequence of phonemes or letters (Snow et al., 1998). Since phonemic awareness is part of phonological awareness, the term phonological awareness will be used in this paper. The development of phonological awareness provides the basic tools needed in order for students to develop an understanding of the alphabetical principle that is the basis of our English language. The essence of the alphabetic principal is that letters in words stand for specific sounds. (Adams, 1990; Ehri, 1994; Stahl, Hester & Dougherty Stahl, 1998; Snow et al., 1998; Spear-Swerling & Sternberg, 1998). While as experienced readers we know that there is

not always a one-to-one correspondence between letters and sounds, beginning readers that can recognize this have an advantage over those who do not figure it out (Adams, 1990).

As with other dimensions of reading, phonological awareness is developmental. This means that students will progress and move along the continuum at different rates. Phonological awareness develops gradually over time and has a causal, reciprocal relationship to reading (Blachman, 2000; Goswami, 2000). In other words the more experience students have being involved with reading, and with reading a wide variety of materials, the better their phonological awareness skills (Blachman).

Phonological awareness also progresses through a series of phases (Ehri, 1994; Spear-Swerling & Sternberg, 1998) from very simple recognition and processing of letter and sounds to being able to work with more sophisticated words. The phase that a child is operating in will have implications for instruction since children need to be taught within the zone they are working.

Word recognition is the ability to recognize words at a glance and to use the conventions of letter and sound correspondences automatically. It is important if students are going to be able to read words in text quickly and automatically (Adams, 1992; Beck & Juel, 1992; Stahl et al., 1998). If students' word recognition is weak their comprehension of the text will suffer (Pressley, 2000; Snow et al., 1998; Spear-Swerling & Sternberg, 1998). Word recognition is also aided and improved by students' ability to decode words as they read. The goal of word recognition is for students to attain a level of automatic word recognition in reading. As decoding and word recognition improve this allows the student more attention for comprehending what is read (Adams, 1990; Reid Lyon, 1998).

Assessment Results

Prior to the beginning of instruction a number of tests were administered to get an accurate picture of Rusty as a reader. To assess word recognition and

decoding skills the Jerry John's Sight Vocabulary Test, the Don Word Test and the Root Word and Affixes Test were administered. The entrance and exit scores following remediation for each test are shown below (See Table 1).

Table 1: Assessment Results for Word Recognition and Decoding.

	<u>Entrance scores</u>	<u>Exit scores</u>
<u>Jerry John's Sight Vocabulary Test</u>		
Independent	grade 2	grade 3
Instructional	grade 3	grade 6
Frustration	grade 4	grade 7
<u>Don Word Test</u>		
Age band	8.5 > 8.11 years	10.6 > 11.00 years
<u>Root Words and Affixes</u>		
	20 % (5/25)	48 % (12/25)

Rusty's difficulty with decoding words had an impact on his score on the Jerry John's Sight Vocabulary test, the Don Word test and the Root Words and Affixes assessment. With the first two assessments, at entrance, it was evident that when Rusty knew a word he was quick and confident in reading it up to the grade two level. For example, the word machine. It has been my experience that students are not able to read this word. They are stumped by the /ch/ sound in the middle. However, Rusty did not even pause when he came to this word; he just read it. I was amazed so I told him that I was impressed that he knew that big word because hardly anyone ever reads it right. He looked at me and replied with confidence, "A snowmobile is a machine!" (Field Notes, 08/00). Background knowledge and interest can be thanked for him knowing this word because he and his family are avid snowmobilers.

With the word lists that followed he was unsuccessful at decoding new words. He was unable to decode fairly phonetic words such as chuckle, rib, stripe and target (Assessment, 08/ 23/ 00). When faced with a 'big word' there was little attention given to trying to figure it out. The most common response was a quick guess based on the first few letters. For example: rescue for restaurant, trace for treasure, listen for licensed, crisp for corpuscle, strange for sausage (Assessment, 08/ 23/ ; 08/ 28/ 00). With some words I would provide him with a clue to see if that would enable him to decode the word. With the word nation, I drew his attention to the /tion/ ending and asked him if he remembered what is said. His reply was /ton/ . With the word stripe I asked him about the silent e rule. He was able to verbalize the rule but could not work the long /i/ sound into the word. He responded with strape instead (Field Notes, 08/ 23/ 00).

Another test that was administered to assess phonological skills was the Root Words and Affixes Test. This test is designed to assess higher order decoding skills by having students read a list of polysyllabic words. There is an emphasis on knowledge of prefixes and suffixes. The student must use word solving skills to decode the words.

The initial results, 20 %, showed that Rusty was intimidated by 'big words' and lacked the knowledge and strategies to try and figure them out . For many of the words he used the same strategy of guessing based on the first few letters in the word. He had limited knowledge of prefixes and suffixes and how to break apart larger words into more manageable parts. With the words disrespectful and revision, he was able to pronounce the parts of the word, but was unable to successfully blend them.

Implications for Instruction

The information from these assessments was used to develop an instructional profile using Rusty's strengths and weaknesses. (Rhodes & Dudley - Marling, 1996). The results of the assessments showed that decoding was a major

area of weakness for Rusty. As a reader he was working in the Phonetic Cue Word Recognition Phase (Ehri, 1994). Students working in this phase have started to use partial phonetic cues to recognize words. These students are able to remember some letter-sound relationships and have developed a basic level of phonological awareness. This description was characteristic of Rusty's reading behavior. He demonstrated an understanding of basic phonological concepts, but had difficulty with more complex patterns and rules. He exhibited minimal strategies for analyzing new words both in and out of context. The strategies he used were low level and were not always effective. His lack of skills in decoding impacted both his fluency and comprehension. Spelling skills and written expression were also negatively impacted by his simplistic phonological awareness.

It was noted through the assessments and interviews that Rusty had, 'big words' phobia. He was intimidated by, and lacked the skills or strategies to work out big words. Rusty, himself (Interview, 08/00) had talked about finding 'big words' hard to figure out and that this was one thing he would like to get better at. His parents also commented that, "... he is very self conscious and has a hard time with big words" (Parent Questionnaire, 08/00). To help Rusty with his big word phobia he needed to learn specific lessons about words and how they work and to practice what he learned in a meaningful way. He also needed to be given the tools or strategies to use when faced with a big word. At the beginning of the lessons he needed to be talked through many words. I would model the process for him out loud so he could both see and hear what he needed to do. For example, I would tell Rusty we need to say the parts of a word, then put the parts together to make a word. I would do this with him watching and then have him try it. Initially, we worked through this together and gradually he gained independence.

Addressing Phonological Awareness In the Lessons

Given the importance of phonological awareness in improving reading (Blachman, 2000), the daily lessons were designed with a ten minute word work

component every day. This part of the lesson was divided into three parts: the individualized 1-50 List, Pronounceable Units, and Affixes. Specific needs of the student were addressed through the individualized 1-50 part of the lesson. Developing and strengthening phonemic awareness was done through the pronounceable units and affixes parts of the lesson. The word lists developed as part of the Later Literacy© Program are used for the last two parts of the lesson. In addition to this time, decoding skills are also reinforced during the reading and writing parts of the lesson. During the narrative and information reading the student is provided with clues if he needed support and the student attempts and success with working out new words, applying strategies and self correcting are all reinforced. Writing time also supports the development of phonemic awareness because during this time the teacher can support the student by helping him make connections from what they already know to what they are trying to figure out.

Individualized 1- 50 List

The 1-50 is worked on daily after the narrative reading is complete. It is the first part of the word work segment. This part of the lesson is totally individualized for each student. The list is developed using both assessment information and information from daily literacy activities (reading, spelling). As the teacher reviews testing results and begins working with the student she observes and takes note of specific areas of need. These could include spelling words, sight vocabulary, a particular pattern of letters or an orthographic rule that the student needs to learn.

Some of the specifics that needed to be covered with Rusty included vowel recognition with short vowels especially /e/ and /u/ ; confusion with /ch/ and /sh/ sounds in initial and final positions of words; word endings: le, tion, ious, ment; vowel combinations: ou, our, ounce, ei/ie, ai; and bossy r's: ar, er, ir, or, ur.

Pronounceable Units

The pronounceable units section is the second part of word work. This part

involves working with high frequency phonograms or word families. To start, the student is shown and told the pronunciation of the unit. The student repeats the unit to be worked with, then reads the short words with the pronounceable unit in them. From here he moves into working with larger words that have the same pronounceable unit. For example if the pronounceable unit is /ent/, the short words might be bent, sent and went. The longer words containing the same unit might be excellent, moment and confident. The words are always talked about as being short and long rather than easy and hard. This keeps the student feeling positive and willing to try; it eliminates the failure when he can not read a word from the easy list.

The lesson covers three pronounceable units per day and all the vowels are covered. It is important that the teacher is aware of how much the student is capable and comfortable doing when working with the larger words. The student does not have to read all the long words in the section. The teacher uses her knowledge about what the student can do and a variety of prompts to mediate learning. For some words, the student may work with a high level of teacher support and with others, may require minimal support and guidance to be successful. It is important that the student does not experience frustration with this task. He needs to be successful and feel a sense of accomplishment and control in this task.

Affixes and Root Words

This is the final section of the daily word work. This section introduces the student to common prefixes/suffixes and their meanings. Each day the student is introduced to a new prefix or suffix. The meaning is discussed and then the student and teacher work through a list of words that contain the prefix or suffix. Systematically teaching this information increases student knowledge about words and how they work. It provides the student with one more strategy to use when working out big words and adds to his understanding of words.

Working With Rusty

Direct instruction and scaffolding have both been identified as having success with helping students improve their phonologic skills (Adams, 1990; Blachman, 2000; Snow et al., 1998; Spear-Swerling & Sternberg, 1998; Stahl et al., 1998). Both of these strategies were used throughout all parts of the lesson and proved to be effective in developing Rusty's decoding skills. As the tutor I carefully observed him as he worked through words. This provided me with specific information about gaps in his knowledge and showed me concepts he had an awareness of, but perhaps could not use.

In working through new words we worked at all three levels of scaffolded instruction. For some words I did the modeling and demonstrating; thinking out loud and telling Rusty what I was doing and why. Most of the word solving we did involved us working together to solve the word. Over time he was able to verbalize what he needed to do to work out a word. He went from needing very direct cues to needing more general ones. By the end of the lessons Rusty was proud that he was solving big words independently.

One of the first concepts that was discussed with Rusty was the idea of 'working out' words rather than 'sounding out' words. I felt that he needed to think bigger and develop a concept of words as parts, not just letters. This is one thing that skilled readers can do; they are quick to examine a word and recognize common spelling patterns within the word. They no longer analyze letter by letter, but can chunk letters in long words into meaningful morphemes (Adams, 1990; Ehri, 1994; Irvin, 1998). Ehri (1994, p. 341) states that this skill is important for three reasons. First of all it facilitates the decoding of unfamiliar words, particularly multisyllabic words. Secondly, if readers have this skill it reduces the amount of memory they need to store sight words in memory. Finally, being able to recognize and read morphemes speeds up the process of accessing words by facilitating letter identification.

Another observation made in talking with Rusty was that when asked what strategy he used to help him with big words he responded, "Sound it out". When

asked to elaborate on how he sounded out words, he could not. Sounding out was something he had heard for years in school, but it was not something he was able to do with more complex words. Assessment and observation had shown he possessed minimal strategies for working out words.

The first strategy that was used to encourage Rusty to stop and examine new words was to have him stop and look through the word to see what the letters were (Lesson, 09/ 07/ 00). In addition to this we talked about the importance of reading the words the author wrote and that all the words in a story are important. At the start of the lessons he needed reminders to stop and look through words. As the lessons progressed he developed an awareness of unknown words and was pausing when he encountered one in text (Lesson, 09/ 11/ 00). In the beginning he was able to identify letter combinations such as st, str and common phonograms like at, am, or, and in. As lessons progressed and he learned more about words, we continued to work together to work out new words. However, I was having to be less explicit about what we learned. We were working collaboratively with Rusty developing more independence.

If Rusty did not know a part of a word I would a) give him a clue if it was something I thought he knew or b) tell him if it was a more difficult pattern. Once he was provided with all the parts of the word I asked him to slide the parts together. Success here depended on the complexity of a word and how common it was, or if the word was known to Rusty. For example one day the word amputate came up in a lesson (Lesson, 09/ 11/ 00). When asked to look through the word Rusty was able to get /am/ on his own. Then he commented on the fact that there was the silent e at the end of the word. However, he did not recognize the common pattern /ate/ and had difficulty manipulating the sounds. He responded first with /an/ then with /at/. He required more support, so I told him it was long a sound and modeled the sound for him. Once he had that information he was able to say all three segments of the word but could not blend it together to sound like a word he knew. I finally said the word and had him repeat it. He told me he had never heard that word before

and that he did not know what it meant. This is not unusual since children and adults can experience difficulty decoding a new word especially if it is one they have not encountered before (Spear-Swerling & Sternberg, 1998).

By lesson 10 Rusty was developing confidence and experiencing success in decoding one and two syllable words. With words of three or more syllables he continued to need highly structured support to work through them. In lesson 19, I could see an improvement in his speed and confidence with shorter words. He was becoming more automatic with his word reading. Also, at this time it was noted that he was now able to independently work out all the parts of longer words, needing less support from me. Sliding the parts together into a recognized word was still developing but another strategy that Rusty was working on to help him was repeating the word to himself several times until it sounded like a word he knew. With this strategy he was also becoming more adept at flexing vowels to see if then it would sound more like a word. For example he was able to get the word mineral by applying this strategy; mine - er - al mine - er - al??? min - er - al. The word is mineral (Lesson, 09/ 26/ 00).

All the time I was observing these changes in Rusty I was constantly asking myself and reflecting on what I needed to do to be a more effective teacher. One of the 'aha' moments I had while listening to the daily tapes of the lesson was to allow Rusty more time to process information (Field Notes, 09/ 27/ 00). Listening to the tapes, I found that I provided him with clues too quickly. He needed time to look through the word, recognize, process and then verbalize. Allowing this extra time would not only give me a better picture of what he was learning and what he had mastered, but also allow him more independence in the process and help him internalize his learning.

Giving Rusty this extra time worked. He accessed his prior knowledge and new learning to work through words and began to show success with longer words (Lesson, 10/ 06/00). He worked out the word 'bungalow' independently and was very, very proud of his success. From here he continued to practice his skills and

new learnings daily in the lessons and independently at home. I was a bit concerned because right when we were at a place where he was showing good progress it was time for the three week fall break. I was worried about the effect this would have on his reading progress. As it turned out the break appeared to have minimal impact on Rusty's reading. He had continued to read over the holiday and in some ways I felt like the time away from the lessons gave him an opportunity to practice and apply what he had learned and to really internalize his new learnings.

In one of the first lessons after the break I was impressed with what I saw. His ability to work out words was continuing to develop; he was using self talk and was more conscious of attending to new words in text and trying to work them out. I was also beginning to see evidence of transfer from the 1-50 part of the lessons in his word work and daily reading. For example, we had discussed the proper pronunciation of /e/ at the end of a word because he had been reading it as /ee/ (Lesson, 09/19/00). The next day while reading he read the word fiddle, as fiddlee. A few lessons later it was noted that, "Rusty had done very well with words ending in /e/ in that days reading." (Field notes, 10/26/00).

The last segment of the lessons was where Rusty really started to shine. He was working successfully at 90 % or better accuracy on the pronounceable unit parts of the lesson and rarely required help from me to work out words. In fact he was now able to work out words independently like apprehend, intergenerational (Lesson, 10/02/00) and polyunsaturated (Lesson, 10/07/00). The day he figured out polyunsaturated I think he surprised himself! After he did it he commented, "Wow, I can't believe I got that second last word!!!! Look how long it is!!!!" (Lesson, 10/07/00). I was pleased to see he was on the road to recovery for his 'big words' phobia.

On the occasions where he did need help rather than give him a clue first I would ask him, "What do you think you need to do?" (Lesson, 10/02/00) In most instances he knew what needed be done. The feedback and reinforcement about his knowing what to do moved the scaffolding process to the lowest level of support. Another positive that I recognized was his applying the strategies and

skills we had learned to his reading of both the narrative and expository texts (Lesson, 10/02/00).

His growing confidence in working out words was complimented by the daily work with pronounceable units. He was starting to realize that he could look for bigger parts of words and not read letter by letter. He had difficulty remembering that the pronounceable unit was part of every word in the group we were studying. He frequently needed reminders that the unit, for example /eeze/ was going to be a part of all words and that it would sound the same in all the words in the group. I decided that I needed to make the rhyme or sound of the word more explicit to him. He needed to hear how the sounds were the same (Lesson, 10/ 03/ 00). To facilitate this in the lesson, I would say the unit to him and have him repeat the unit. Then I would read 3-4 words from the list and ask him if he heard how they were all the same and what was the sound that was the same? I would then have him say the rhyming sound and repeat the model words again. Then he would proceed with the other words on the list.

Another thing I noticed as we worked through the pronounceable units was his weakness in identifying some of the vowel sounds, especially short /u/ and /e/ (Lesson, 09/22/00). This can be a common problem due to some students inability to discriminate between letter sounds. To help strengthen his basic vowel recognition skills I jumped from working through the pronounceable units starting with /i/ to working with the pronounceable units that started with /u/ (Lesson, 10/05/00). Also towards the end of the lessons there was still some confusion evident with the short /e/ sound. Since we had covered all of the pronounceable units, we went back and reviewed the short /e/ phonograms. Rusty's showed improvement in doing these phonograms for the second time.

For the Affixes part of the lesson I decided to work through suffixes first. It was evident from the assessments that Rusty was not attending to word endings as he was worked out words. I felt that by targeting the suffixes this would help show him the importance of word endings and encourage him to look through words

and notice the endings. This approach worked well with Rusty. He was able to start to recognize suffixes on words and began to talk about looking for root words as a strategy in his decoding. We did work on prefixes for a brief period in the beginning of the lessons. I introduced the prefixes /re/ and /de/ because words with these prefixes had been encountered in reading and I had noticed that he had difficulty with them (Lesson, 09/15/ 00). We covered these two prefixes and then continued to work with the suffixes.

Exit Testing Results

As the exit testing and records from daily lessons show there was a marked improvement in Rusty's oral reading fluency, decoding and word recognition over the ten week period. While he was not completely over his 'big word' phobia' he now had the tools and the confidence to attempt new words. His oral reading was much more fluent with a more appropriate reading speed, increased observation of punctuation in text and less stumbling and starting over new words.

The largest area of improvement was in his phonologic awareness and decoding skills which also had a positive impact on his automatic word recognition. The exit test results showed that Rusty was working close to his chronological age and grade level with decoding words in isolation and in context. On the Jerry John's Sight Word Test his instructional level had improved from a grade 3 to a grade 6 level (see Table 1). The Don Word Test had similar results. Rusty had improved from a 8.5 > 8.11 age band to a 10.6 > 11.00 year age band (See Table 1). At the completion of the lessons Rusty was 11. 1 years old.

Rusty's final score on the Root Words and Affixes test was discouraging to me when I first looked at it. His score was 48 %. He had only shown 28 % growth in this area. However, a close examination of Rusty's responses showed that while accuracy was not 100 % he had definitely learned new strategies and had started to apply them independently. Rusty was less impulsive at guessing words. All words on the list had been attempted two to three times. If he did not get the word after the

third try it was marked incorrect. His attempts demonstrated that he was looking at all parts of the words and using the knowledge about pronounceable units and affixes he had learned in the lessons. For many of the words he was able to identify each segment, but unable to blend them correctly.

In informal reading assessments, word recognition increased as did Rusty's ability to work out words in context. On the Jerry John's Oral Reading Assessment, grade five, Rusty went from reading at a frustration level on word recognition to reading at an Independent/Instructional level.

At the grade six level his word recognition was at an Instructional / Frustration level. When reviewing his reading, one significant difference was noted. Even though there were eight miscues in the reading passage Rusty had attended to, and attempted to figure out the words. This was a positive step in Rusty's reading development.

Impact on Spelling Skills

Research (Gordon et al., 1998; Irvin, 1998; MacDonald, 1995, Shanahan, 1992; Wilson, 1995) shows that the processes of reading and writing are closely connected. Reading and writing both involve text and are both cognitive, transactive, social and communicative processes (Gordon et al., 1998; Shanahan, 1992 & 1997). Reading and writing processes are viewed as overlapping because they both share a core knowledge of processes and strategies such as phonological, orthographic and grammatical knowledge, understanding the meaning of words, knowing and using text structures and drawing on prior knowledge. However, while reading and writing share many of the same processes they involve different patterns of thinking and different approaches to making meaning (Gordon et al.). When readers read they make sense of a text already produced by an author. As a writer, even though the task involves many of the same cognitive elements of reading, the task is reversed. The writer must utilize what he or she knows about words, text structure and prior knowledge to create his or her own message. Another

important similarity with reading and writing is that they are both metacognitive activities where the readers/writers need to exercise cognitive control over what they are doing. Shanahan (1992) commented that when students learn those things that make them better readers, they know something that can be used in the writing process and vice versa (p.264).

This connection between an improvement in reading impacting a student's performance in writing is what I saw with Rusty over the time I worked with him. While my research focused primarily on growth in reading, improvements in his writing ability were noticed. In addition to his gains in word recognition and decoding he showed improvement in his spelling ability. This improvement in spelling is not a big surprise since it is known that reading and spelling have a reciprocal relationship to one another (Bear & Templeton, 1998; Goswami, 2000; Templeton & Morris, 2000). This means that what a learner learns in reading is eventually transferred to spelling and vice versa. The act of reading involves being able to decode words while the act of spelling involves having to encode words.

Spelling like most other literacy processes is developmental. Students progress along a continuum continually adding and consolidating new information into their knowledge base (Bear & Templeton, 1998; Templeton & Morris, 2000). Given the developmental nature of spelling it is important that students are provided with instruction at their level. In fact when children are introduced to new spelling concepts before they are ready it can be counterproductive. Students need time to consolidate what they know about known words before they move on to new more challenging words (Templeton & Morris, 2000).

Spelling was a component of the program that was assessed at both entrance and exit to the program. It was assessed both formally and informally. The formal spelling assessment was the Don Word Test (MacDonald, 1995) and the informal assessment was a spelling accuracy count from Rusty's Summary Writing Assessment. The Summary Writing is a short, written response that summarizes the oral reading passage (from the Jerry John's Informal Reading Assessment) the

student has just read. For the writing activity the oral reading passage that was at the student's instructional level is used. A spelling accuracy count looks at a piece of student writing and uses the total number of words in the passage and the number of words spelled correctly in a passage to derive a percentage of total words correct. I included the spelling accuracy count for my own purposes because I felt it would provide me with some information about his spelling skills in context.

On the Don Word Test (1995) Rusty was working at a grade 2.9 level at entrance to the program. Upon exit he was working at a grade 3.7 level. Over the 10 weeks he had gained almost a full grade level. While this spelling score was still significantly below grade level, many of the words he had misspelled by only one letter or the words had the correct letters but not in sequence: rase/ raise, evreybody/ everybody, amont/ amount . He demonstrated an awareness of many of the rules we had discussed as part of lessons and actually tried to apply many of the strategies we had talked about for spelling. His test paper also showed signs of attempts to self-correct words. While he still may not have spelled them correctly the awareness and follow up of self-monitoring is a huge step for Rusty.

For the informal assessment of the spelling accuracy count Rusty's entrance paragraph had 62% (40/65) of the words spelled correctly. In this paragraph most high frequency words were spelled correctly and some other words like seen, tricks, school and solved were spelled correctly. Rusty had used some invented spelling and these words were highly phonetic, easy to read and did not have a negative impact on his communication. For example he had spelled wocting/watching, juimped/jumped, wor/wore, mesrty/mystery, everone/everyone.

At exit the spelling accuracy of Rusty's paragraph was 93% (40/43). The three words he spelled incorrectly were fiend/friend, soes/shoes and nickname/nickname. All of these words were only one letter off the acceptable spelling. Other words he used such as rude, apartment building and holes were all spelled correctly. This increase in spelling accuracy is possibly reflective of one of

the strategies introduced in the lessons. This was the use of text, when possible, to help with spelling words.

Rusty's improvement in spelling can be attributed to the results of the word work part of the lesson and to the amount of extra reading he was doing in and out of school. While the goal of word work is primarily to address decoding, it helps develop encoding at the same time. The word work is explicit and direct and targets the student's individual spelling needs at his or her level. The word work part of the lesson addressed specific areas of needs Rusty had, taught and extended phonograms (spelling patterns), taught about prefixes, affixes and root words. In addition to this word meanings and word derivatives were also part of the incidental learning that took place (Bear & Templeton, 1998 & Templeton & Morris, 2000). Rusty was always encouraged to ask for clarification if he did not know the meaning of a word either in context, or on a word study list. Being the enthusiastic learner he was he took every opportunity to learn the meanings of unknown words. Also, when the opportunity arose I would try and use word derivatives to show him how words were related, like families, to extend his learning. Some of the words we examined included: science, scientist, scientific (Lesson, 08/30/00); electric, electrical, electricity, electrician (Lesson, 09/07/00); sarcastic, sarcasm, sarcastically (Lesson, 10/02/00); scene, scenic, scenery (Lesson, 11/01/00).

The amount of reading, at an appropriate level, that Rusty was doing in the lessons, in his class and at home also had a silent impact on his reading and spelling skills. Rusty's active involvement in reading gave him the opportunity to practice and fine tune what he was learning about words both on a basic level and at a more complex level. Bear and Templeton (1998) believe that learners construct knowledge about words and spelling patterns in a general way and that this core knowledge is utilized when learners are involved in both the reading and writing process.

Summary

Over the ten weeks of lessons, there was improvement in Rusty's ability to recognize and work out words in his reading. This improvement was observed with both narrative and informational text. However, reading is more than just recognizing words on a page. While being able to read and decode words is important to the act of reading, the words must have meaning attached in order for comprehension of the passage to occur (Reid Lyon, 1998; Rhodes & Dudley-Marling, 1996).

CHAPTER 4: COMPREHENSION

For many people comprehension is considered the heart of reading (Rhodes & Dudley-Marling, 1996). Comprehension is why we read, it is the ability to take and make meaning from what you have read. Over the past 25 years there has been a shift in the understanding and definition of reading comprehension (Fielding & Pearson, 1994; Irvin, 1998; Pearson, Roehler, Dole & Duffy, 1992; Rosenblatt, 1994). There has been a shift from viewing comprehension as a series of discrete skills that are taught in sequence to viewing it as a more interactive process between the reader and the text. Comprehension is seen as a complex process involving interactions and transactions between readers and texts in various contexts and for various purposes (Fielding & Pearson, 1994; Pearson et al., 1992; Rosenblatt, 1994). Ruddell (1993) defines comprehension as a process in which the reader constructs meaning while, or after, interacting with text through the combination of prior knowledge and previous experience, information in the text, the stance he or she takes in relationship to the text, and immediate, remembered or, anticipated social interactions and communication (p.415). Reading comprehension is a complex process because it is impacted by many factors such as fluency, word recognition, vocabulary development, background knowledge, attention, memory and reader motivation, purpose and past experience. The development of comprehension ability is also thought of as a long term developmental process (Pressley, 2000).

The work of Louise Rosenblatt (1995) views the reading process as a transactional activity, where the reader interacts and responds to the text based on the stance they are reading from. The stance does not refer to the text but to the reader's attitude of mind or focus of attention (purpose) while reading (Rosenblatt, 1995, p.350). When reading a reader can transact with the text from either an efferent or aesthetic stance. The reader's stance is not set and can shift from efferent to aesthetic, along a continuum, during reading (Rosenblatt, 1994). An efferent

stance is the way I remember being asked to engage in text as a student. The efferent stance is the type of reading where, "attention is predominately on what is to be extracted and retained after reading" (Rosenblatt, 1994, p.1066). This translates to thinking about what is right or wrong, or the factual information in text. The aesthetic stance is the more personal response to reading, or what can be called the lived through experience. It accounts for a readers feelings, reactions, connections and responses to the text.

Comprehension, like other aspects of reading, operates on different levels. There are literal comprehension and higher order comprehension skills. With higher order comprehension skills students become more reflective and are able to move beyond the literal level of what the words say to get to the underlying meaning of the text. Also there is a difference in the types of comprehension demands that schools and teachers make depending on the age and grade level of the students (Spear-Swerling & Sternberg, 1998). Some researchers believe that there appears to more emphasis on word recognition in early grades, when students are learning to read, with a shift to reading comprehension in later grades (Spear-Swerling & Sternberg, 1998). While the earlier grades may place a more direct and observable emphasis on word recognition, I feel they do this in conjunction with, not at the expense of, comprehension. Even Marie Clay's, Reading Recovery program, for young, at-risk students addresses comprehension as part of the daily lessons (Clay, 1985).

According to cognitive psychologists, comprehension involves a number of lower order and higher order processes specific to reading (Pressley, 2000, p.546). If word level processes are not mastered it can be a challenge to carry out higher order processes that are summarized as reading comprehension strategies. Skilled reading comprehension is impacted by other factors such as phonemic awareness, word recognition and reading in context (Pressley, 2000; Spear-Swerling & Sternberg, 1998). Fast accurate word recognition is necessary for the development of higher order reading comprehension (Adams, 1990; Pressley;

Spear-Swerling & Sternberg, 1998). The reason for this is that when children have to expend their mental resources on word recognition they have fewer resources left over for reading comprehension (Pressley; Reid Lyon, 1998; Samuels, Schermer & Reinking, 1992). An individual has only so much attention available at one time, if a reader has to focus too heavily on word recognition, or is having to decode several words, the meaning and flow of what is being read is lost. Achievement of automatic word recognition sets the stage for rapidly increasing reading comprehension because the reader can focus attention on understanding the text. However, it should be noted that just because a reader demonstrates automatic word recognition this is not a guarantee of good reading comprehension (Gordon et al., 1998; Pressley, 2000). There are some students that can read a passage fluently, without error, and have no idea what it was about. As students develop wider sight vocabulary and automatic decoding it becomes possible for them to shift their focus in reading from strategy use to aid decoding, to strategy use for improving comprehension.

Students that struggle with higher order comprehension tasks, or that are functioning at a very literal and concrete meaning are also students that are less skilled at using strategies to aid their comprehension. While these students may have some strategic knowledge it is less sophisticated and they are less adept at using it than their normally achieving peers. These readers may fail to use strategies to aid comprehension not because they are intrinsically incapable of using strategies but because they have not had the kinds of reading experiences that would encourage them to generate and use these strategies (Spear-Swerling & Sternberg, 1998).

There are some distinct comprehension differences between what skilled and less skilled readers are able to do during reading (Pearson et al., 1992; Reid Lyon, 1998; Snow et al., 1998). When reading, skilled readers are better able to distinguish between important and unimportant information in text, demonstrate an

awareness of their comprehension of text, monitor their comprehension processing and attend to deep structure of text.

While less skilled readers may demonstrate weakness in some or all of these areas it is possible for these students to learn to use these strategies. Comprehension skills, like other reading skills need to be taught to these students in a direct and systematic way (Reid Lyon, 1998). By finding out the specific strengths and needs of a student a teacher can very specifically teach, model and reinforce new reading behaviors with students.

Different ways of viewing reading comprehension as a cognitive, affective and transactional activity were discussed in chapter one. I had a difficult time trying to determine to which of these theories my research was closely related. Initially, I felt that I had a balance between the three theoretical perspectives in my research. However, I now realize that this research is focused in the cognitive psychology view of reading. While it is important to consider and develop the transactional and affective views of reading comprehension, the focus here was on the cognitive processes that underlie reading.

The transactional and affective views of reading are important. Students need to become comfortable and competent reading along the continuum between efferent and aesthetic. The feelings, reactions and responses that one has to text are important both for improving reader affect and comprehension. However, unless a reader has developed competence with the macroskills that enable them to be a successful reader they may be unable to actively and independently step into reading the text. Balance is important: for comprehension and for the benefit of the reader.

In this chapter Rusty's reading comprehension in the areas of understanding text, vocabulary knowledge, strategy use and affect will be discussed. The results of Rusty's entrance and exit scores will be presented and his development in the areas of comprehension will be followed through excerpts from daily lessons. As was discovered in the chapter on word recognition and decoding, improvements in

one literacy area can lead to improvements with related literacy processes. The end of this chapter will examine changes in Rusty's writing.

Assessment Results

Table 2: Assessment Results for Comprehension

	<u>Entrance Scores</u>	<u>Exit Scores</u>
Jerry John's	Grade 5 Independent/ Instructional	Grade 5 Independent Grade 6 Instructional/frustration
Self-correction Rate	1:13	1: 5
Oral Retelling	Descriptor 2	Descriptor 4-5
Alberta Diagnostic Cloze Passage	52 %	61%

At the start of our lessons Rusty demonstrated that he had some strengths in the area of comprehension. He was able to read and respond to a grade five reading passage with 85 % accuracy. While he was able to gain an understanding of the passage he read, he exhibited difficulty with word recognition while oral reading the passage, which impacted his ability to understand and respond to the text at a higher level. His answers to questions were general and he would often fill in with background information which was inaccurate. For example, on the question: What kinds of stunts did the mystery person do?, he used his knowledge of skateboard

stunts to come up with an answer, but his answer did not match the stunts that were performed in the passage. At the same time when he read the passage he read that the skate boarder jumped a club rather than a curb (Assessment, 08/27/00). This miscue did not sound right or make sense yet there was no attempt to try to correct the error. In fact many of the errors made in reading were not corrected. Rusty's self-correction ratio for the passage he read was 1:13. Rusty does not attend to errors or work at making the text make sense. He reads quickly and without monitoring. Predictions of unknown words were based primarily on graphic similarity. Cross checking with the three cueing systems was not a skill Rusty was aware of or used in his reading.

His retelling was very disorganized and he had a difficult time synthesizing the main idea into a coherent synopsis of what happened. He often just pulled out information he remembered from the story but was unable to filter it for importance. On the Holistic Rating Scale for Oral Retelling (Appendix E)(MacDonald, 1995) he was given a rating of two. The two rating describes retellings that demonstrate some simple, concrete meaning where responses may include major characters, events, or information in random order. This rating was reflective of Rusty's ability to retell what he had read.

From the assessment it was clear that Rusty had definite needs in the area of comprehension. He needed to develop a sense of reading for meaning. He needed to learn to integrate his background knowledge and experience with the text to help him build meaning and to self monitor as he read. In working with Rusty three main areas were targeted for direct instruction. These included improving general understanding of what he read, vocabulary knowledge and strategy development.

Since comprehension, like other components of reading, is developmental it was important to determine where Rusty was working along the developmental continuum and meet his needs at that level. With comprehension there needs to be some automaticity with lower level skills before a student can be expected to move up to using higher level comprehension skills (Pressley, 2000). Therefore, before I

could expect to see movement to a higher, more grade appropriate level of functioning we had to target and adequately develop his basic comprehension skills first.

Understanding text

Rusty's ability to understand the texts he read was weak. He needed to become more attentive and strategic in his interactions with text. He needed to be made aware that there was a purpose for reading and that one of his jobs as a reader was to interact and create meaning from what he read. In targeting starting points for instruction it is important to remember that comprehension is developmental, consequently, learning needs to be addressed in a logical way. Student's need to have some comfort and independence with base comprehension skills before they can successfully move on to higher order ones.

In addition to developing basic comprehension skills to help move Rusty through text I also felt it was important to try and develop his aesthetic responses to text. Rusty behaved like a typical struggling reader when responding to text. It has been my experience that students who struggle with reading tend to read from a very efferent perspective. They read to answer the questions that they have come to learn will be asked at the end of reading. They have a difficult time engaging with the text on a personal level. These students need to become more aware of the different stances in reading and that it is acceptable to connect personal experiences and feelings to what they read. They need to realize that reading is not always about finding the correct answers.

It was clear from assessment information that Rusty's word recognition abilities were having an impact on his comprehension. Research shows that if word level processes are not mastered, meaning that recognition of most words is automatic, students will have a difficult time implementing the higher order processes that are summarized as reading comprehension strategies (Pressley, 2000). Initially, Rusty's weak word recognition skills impacted his understanding of what he read

because he was having to direct much of his attention to recognizing the words in the text. This left him limited resources for making meaning from what he read (Pressley, 2000; Reid Lyon, 1998; Samuels, et al., 1992; Snow et al., 1998; Spear-Swerling & Sternberg, 1998).

Prior Knowledge

When student's sit down to read a text they bring with them a range of prior knowledge and experience about a wide variety of topics. In addition they also have personal feelings, responses and emotions about what they are going to read (Rosenblatt, 1995). This prior knowledge has an impact on reading comprehension for both narrative and informational texts (Pressley, 2000). Students need to realize the importance of activating and applying what they know about the world around them to the material they read. Three types of prior knowledge are important for readers to be aware of when they read: general prior knowledge, knowledge of author intentions and goals and knowledge of text structure (Irvin, 1998; Dole, Duffy, Roelher & Pearson, cited in Irvin, 1998).

Rusty was a student that in conversations demonstrated an understanding about many different topics. He was able to listen and contribute to discussions on many different areas. However, when it came to activating and applying these same skills in his reading he needed support to do this. He needed to be explicitly shown how he could use his personal knowledge in combination with what he knew about the story to improve his comprehension. Rusty was able to verbalize what kinds of prereading strategies he could use, look at the pictures, read the back cover, think of the title; however, he did not automatically use these strategies.

In the beginning of the tutorials when he was asked to make a prediction about the story he would say, "I don't know" or "I am not sure" or give a non committal answer. For example, in one of the first stories we read I had asked him to make a prediction about the next chapter based on the title, He read the title then said, "His luck could get worse, or better....?" (Lesson, 09/07/00). I prompted him

to pick one or the other and asked him to think about what he had read so far in the story and make a guess based on those events.

To help him start to use the text and his knowledge I tried to introduce him to strategies he could use to help him. The goal was to have him become so comfortable using them that it would become automatic and internalized. We talked about how using the title of the book and chapter titles help a person by giving ideas about what might be happening. We discussed thinking about what has already happened in the story and what we know about characters. Rusty needed to connect his predictions to what was happening in the story. What he was thinking had to be connected to what he was reading not to something that he had randomly made up. Pressley (2000) found that this is one of the things weak readers do. They tend to undermine their comprehension by, "relating to the texts they are reading prior knowledge that is not directly relevant to the most important ideas in the text, making unwarranted and unnecessary inferences as they do so (p. 550). Rusty did show signs of connecting his predictions to what he read or to titles of chapters. He was quite proud of himself after reading one evening when he came to me the next day and proudly reported, "When I read the title of the chapter last night it said, "Another Attack, and guess what....? There was. Another bike got trashed at the school." (Lesson, 09/28/00).

In addition to starting to see Rusty apply some of the strategies we talked about in lessons he also reflected some of this new learning in our lesson 25 interview and on the exit Metacognitive Strategies Index Survey (Cassidy Schmitt, 1990). During the lesson 25 (Lesson, 10/24/00) interview one of the questions I had asked Rusty was, "What are some of the strategies that you have learned in the lessons that help you before you start to read?". His response to the question was, "You need to always read the title of the book and read all the titles of the chapters because it will give you a hint what the chapter is all about." While at this point I was not totally confident that he was applying this strategy independently and consistently in his reading, it did demonstrate that he was internalizing some of

what we learned and that with time it would become automatic for him. I was pleased to see that after the completion of our lessons he indicated that reading the title to see what the story was about was a strategy he used, or should use before and during reading (Assessment, 11/23/00).

Rusty had a difficult time accurately retelling what he had read. This was evidenced by his weak and disorganized responses to text. When asked to talk about what he had read last night he would just talk about the bits and pieces he remembered, whether they were important or not. He would start to tell about what had happened in no particular order and one thought would trigger another until there was just a barrage of information. His responses also lacked important details such as character names or places (Lesson, 09/14/00).

To provide him with a structure for retelling what he read I asked him to think about reporting what had happened at the beginning, middle and end of each piece of reading. This was a slow process and in the beginning he was prompted with, "What happened at the beginning of what you read?". Knowing that he needed to pay attention to the sequence of events and having this clear prompt appeared to help Rusty. He began to provide more organized summaries of his readings (Lesson, 09/12/00). Once he was able to complete an organized retelling the task was changed. Rather than simply retelling the beginning, middle and end of what he read he was asked to identify only the main idea or important events from the reading (Lesson, 09/26/00).

He still needed prompts to use actual names rather than he, they, them. When he would give me a nonspecific answer I would remind him that he and I knew the story and the characters but that it was important to make it clear if he was telling someone that did not know the story. These reminders gradually began to become part of his thinking. He began to monitor this in his retelling and would catch himself using a general term and would change it to include the specific information (Lesson, 10/02/00).

As the lessons progressed Rusty became more comfortable with producing an organized and sequenced summary of what he had read. It was still important that I monitored his summaries for inaccurate information or for important pieces of information that had been left out. For example, at the end of one book he provided me with a summary of the events of the last two chapters. However, he omitted the one main event, the stolen guitar, and was not able to synthesize the information from the entire book to tell me why George had created all this trouble at the rodeo (Lesson,09/12/00). Rusty came up with the answer, "George did it so he could have extra time". This was an answer he created based on what he was thinking might be sensible but this did not follow the reasons in the story (All along George had been creating a series of mishaps because he wanted to scare Mel Jones, the main performer, away from the rodeo so that he could have a chance to perform). Rusty continued to progress in his ability to accurately retell what he read in a story. By lesson 30 he was demonstrating more consistent success in identifying and discussing the main idea of a story or chapter with appropriate supporting detail.

By the end of the lessons there was consistency in his responses to text. Rusty was able to give a sequenced retelling of events and was more consistent at identifying what was important in what he read. His retellings were becoming more specific in providing important details about the reading such as character names and places. He was also much more confident about answering questions related to what he read. He was starting to rely on information in the text to answer questions and wasn't just making an answer up based on what he thought might fit. He had developed an understanding that there is meaning in the text and that it is important to attend to the author's message.

Inconsistency in Understanding Text

This was another area that had a significant impact on Rusty's understanding of what he read. Sometimes his understanding of what he read was at a very concrete, literal level. He had a difficult time reading between the lines and drawing

inferences from what he read. Spear-Swerling & Sternberg (1998) noted that understanding and recalling information that is explicitly stated in text is a skill that must be mastered before students can move onto developing inferential skills.

In other cases Rusty would elaborate about the text based on minimal understanding of a few words or a phrase that he remembered. On one occasion when we were discussing the story events he told me that, "Someone has been letting the horses out every night" (Lesson, 09/07/00). I knew from the selection that this was not true. The horses had actually only been let out one night. In this instance he was relying too heavily on what he thought was happening without attending closely to what was being stated in the text. Together we went back into the text and reread the paragraph to clarify the information. This became an important point to watch with him. He really needed to develop a more balanced interaction between what was in his mind and what the printed text stated. He needed to learn to have both systems work together to produce more accurate meaning. This was an area that we worked on right through to the end of the lessons for this research. On some days Rusty had no problem making inferences in the story but this was inconsistent. One day he had no difficulty figuring out why the main character had asked the witnesses at the scene of the crime to show them their hands. He knew that the character was thinking that because of the nature of the vandalism; anyone in the crowd that may be guilty would have grease spots left on their hand from the bike chain (Lesson, 09/28/00). I was impressed that he made this connection without it being clearly stated in the story. Likely it was an easy connection for him to make because of his mechanical background and experience in working with snowmobiles.

Yet, I was surprised several lessons later when a connection I assumed would be easily made was a real challenge for Rusty. We were still working through the same novel and the detective in the story was still trying to catch the person who was vandalizing the bikes in the school yard. The chapter ended with the detective wondering whether or not he would catch the vandal in the act during the Halloween

party. As part of post discussion I asked Rusty, " Why do you think it might be hard for Hunter to catch the vandal during the Halloween party?". I assumed this would be a straight forward question to answer and was surprised by the amount of mediation it took to get Rusty to come up with an accurate answer. His first response was that it would be hard to sneak out of school. His second was that when the vandal got outside there would be someone watching the bikes. Then he thought the 'basher' might wait until after school. At this point I asked him some questions about Halloween parties. After a few questions and activating his knowledge of Halloween parties he went, "Ohhhhhh! I get it. The basher might be dressed up and they won't know who it really is!!!!" (Lesson, 10/06/00).

His ability to synthesize accurate information from what he read needed ongoing monitoring for accuracy in his responses and to teach him to fix-up or clarify when he was not sure or when his responses were inaccurate. In one lesson he was applying the prereading strategies he had learned, but unfortunately did not use them in an efficient way. When giving me his summary of the previous night's reading he told me that, "Lucas' Mom went to see the teacher and that Lucas has to get glasses." (Lesson, 10/25/00). This was not what had happened. I asked Rusty to go back and read in the story to find where this had happened. He was unable to do this because Lucas' Mom had not gone to the school. Rusty had taken what he knew about the story, that Lucas' Mom had received a note from the teacher and combined it with the title of the next chapter, Eyeglasses, to come up with this scenario. This response was so far off what happened I wondered if he had actually read the night before, or if he was making a wild prediction to cover up that he did not read.

Over the course of this study, Rusty did make progress in his ability to better understand text. He became more consistent with activating his prior knowledge about the world, his personal experiences and what was happening in the story. He was able to provide more appropriate and well organized retellings of what he read. He was able to read more closely and was developing strategies to go back and

check up on what he read. Self-questioning was an area we had worked on only minimally, but he was developing a sense of it.

The improvements in comprehension were also as a direct result of his improved decoding and word recognition skills. He was a more fluent reader and was able to be more active in working out words. He no longer had to completely stop and think to work out new words.

Vocabulary Knowledge

Vocabulary development and an understanding of word meanings is an important part of reading comprehension. As reading tasks become more complex and shift from narrative to informational texts this becomes even more challenging for readers. Reading comprehension is negatively affected by lack of relevant word knowledge (Snow et al., 1998). Students have different types of working vocabularies. They have words that are known and words that are unknown; words that they have seen before and words that are new to them. Words also have the challenge of having multiple meanings, and the meaning of some words can become heavily context dependent. Vocabulary is an important component to be addressed when helping students to become better readers. Students need to develop an awareness of the variety and complexity of words as well as develop some working strategies that will help them continue to add to their ever increasing vocabulary.

Lack of vocabulary knowledge was another area that caused Rusty comprehension problems when he was reading. I was initially surprised by the number of words of which he did not have an understanding. I first began to notice this when we were working through the larger words in the pronounceable units parts of the lesson. During this part of the lesson the student is encouraged to ask for clarification if he does not know a word. Rusty did not know words like cellophane, transistor, amputate, sedate, illuminate, ventriloquist, dunce, trudge, inmate, innards and insolent. While all these words are in isolation, as part of a list of words provided

with the Later Literacy© Program, there are some I would have expected him at least to have heard before. The word insolent (Lesson, 10/ 30/ 00) was one exception. This is probably not a word that an average grade six student would know. Rusty was able say all the parts in this word, but not able to slide the parts together into a recognizable word. The word was obviously not in his familiar listening or spoken vocabulary.

Vocabulary in context was also a challenge for Rusty. Sometimes he was able to recognize that he did not know a word and would bring this to my attention and other times he had no awareness that he did not know the word. The challenge for me was to determine if it was an important word to have him attend to, as in knowing what the word contributes to the overall understanding of what he read. He had difficulty with words in context like holster, embankment, canal, draft, brief. He also had trouble with phrases such as ' sat opposite him' and ' coins and notes'.

Word meanings and sometimes their pronunciations are necessarily context dependent ; for example, 'spring ' can refer to a season of the year or a coiled piece of metal, and 'read' can be pronounced like 'reed' or 'red' . Context is important in interpreting the meaning and pronunciation of a word in a sentence, and skilled readers do this more efficiently than less skilled readers (Snow et al., 1998).

One of the first words that Rusty had difficulty with was the word performance. When we were talking about his reading from the night before, he brought it to my attention that, "There was a word in there that both Dad and I didn't know what it meant." (Lesson, 09/07/00). That word was performance. Rusty further added that, "I knew the word off by heart but I didn't know what it meant.". What he really meant was that he knew the word, but could not determine the meaning in the context it was used in the story.

To help figure out the word I went back into the text and reread the paragraph modeling the strategy of rereading for meaning. Following is our discussion as I tried to mediate his understanding of the word.

Researcher: " Do you know what a performance is?"

Rusty: "No."

Researcher: What about if you did a performance at school?

Rusty: A drama..?

Researcher: Yes, okay.... Like a play, if you put on a play you can call that a performance. So what do you think the author is talking about here?

Rusty: About the first performance....? (Still hesitant, not confident)

Researcher: About the first performance of what?

Rusty: I don't know.

Researcher: Well let's think about what the author is talking about and what the story is about. What is the story about?

Rusty: The rodeo.

Researcher: Yes, they are talking about the first performance or the first show at the rodeo.

Rusty: Oh, oh yeah... I get it, there are two shows, or two times they are having the rodeo and they are calling it a performance.

It took a lot of talking to mediate an understanding of a common word. This was my first glimpse that vocabulary would be an ongoing issue in the lessons.

Thus, throughout the lessons we worked on developing strategies for figuring out words and developing an awareness of when Rusty did not know a word. Developing an awareness of when Rusty did not know a word was going to be a challenge since it was going to be text specific and not every word in a text has to be known. Students can work around a fairly high number of unknown words in a text, about 15 % and still be able to read with comprehension (Irvin, 1998). The challenge for Rusty then is to develop an awareness of whether or not the word is important to his understanding of the text.

Homonyms and words with more than one meaning were another area of weakness for Rusty. He has a basic understanding of more common homonyms

such as night/ knight, one/ won but demonstrated some confusion with less common ones. One day as we were reading through the list of pronounceable units for /ole/ , he encountered and quickly read the word hole. A few seconds later he saw the word whole and was baffled. He was confused because he had already read the word and probably was not aware that it had two spellings. We talked about homonyms and how words can sound the same but have different meanings and then discussed the meaning of each word (Lesson, 10/ 30/ 00). Another day we were working with the pronounceable unit /ore/ and when he had to write his key word for for it, he wrote the word pour. First of all I had to draw his attention to the fact that the word he wrote did not have the phonogram /ore/ in it like it was supposed to and then took the opportunity to again to show him the different spellings of pore/ pour and discuss the meaning of each one.

Words used in an abstract context were a real challenge for Rusty. One day as we were reading he was stumped by the use of two regular words in an abstract way in the following passage:

Layers and layers of anti-gravity cars and and lines of people snaked around above us. (Scieszka, 1995; p.30)

We surfed through crowds of people streaming out of giant buildings.(p.38)

It was very interesting to watch Rusty's behavior as he worked to try and determine the meaning of snaked and streamed in the passage. This challenge happened towards the end of our lessons, so he was able to try and apply some strategies to figure out the word meanings. However, he was not successful on his own. He continued to need support.

Rusty read up to the word snaked, paused, read the word stacked, then read ahead to check the meaning. It did not fit. So back he came again to the word. This time he tried the word snacked. He checked and looked very puzzled but kept on reading. He went through the same steps a few sentences later with the word streamed. He tried to figure the word out, but substituted the word screamed

instead. While he knew the words he read did not have the letters to say what he said, and he knew that what he read did not really make sense but did sound right, he could not fix it up. He could not associate the word snaking with anything outside of his concept of snakes. I went back and reread the passage to him asking him to just listen. Then I asked him what does the author mean when he says the people snaked around above us? He responded " I don't know.". I then drew his attention to an extension cord that was on the floor and told him to look at the way it was snaking around the legs of the tables and chairs. I told him it looked like a snake the way it was curving and that that is called snaking and is used to describe. It took a while for him to understand that. Then we went back to the text and reread the sentence and he was able to understand what was going on in the book. It was the same thing for the word streaming; he thought it made sense that people would be screaming out of buildings although this did not fit with what was going on in the passage, but it was all he could think of. He had one concept of stream and that was a small river and in his mind, how could people be like a small river? Rusty's limited understanding of abstract words will likely remain a challenge for him as he moves into reading more grade level material. Irvin (1998) found that as students progress into higher level reading materials that words are increasingly used in more abstract rather than concrete ways. Consequently, as student's move into reading more challenging texts it is important for them to be aware of the multiple meanings of some words.

As we neared the end of the lessons Rusty had developed some strategies for dealing with vocabulary in his reading. In one of our last books he encountered the word mime. When he was reading to me the next day I asked him if he knew what a mime was and he said, "No, I didn't but then look," and he pointed down the page, "I kept on reading and it told me right here what a mime was".

Vocabulary will continue to be an area of growth for Rusty. Through the lessons he developed an awareness about the importance of words and their meanings and he developed some strategies to help him figure out word meanings.

One of the biggest builders of student vocabulary is reading. Rusty is a keen reader and is now able to read more age/ grade appropriate texts. Hopefully his continued success in reading will help to expand his knowledge and understanding of words.

Strategies

Rusty is not a very strategic reader. As was mentioned in the decoding section he began the program with minimal strategies for helping him read with understanding and for monitoring his understanding of what he reads. In reading he does not recognize when his miscues have had an impact on the meaning of what he has read. He does not have an awareness of whether or not what he is reading sounds right, looks right (has the right combination of letters to be the word he has read) or makes sense. Reading without this awareness means that overall comprehension is very general and often contains misunderstandings and incomplete or incorrect information. In addition to fix-up strategies while reading Rusty needed develop strategies for preparing himself to read and guiding himself through a piece of text.

In the beginning of the lessons, Rusty really needed to have comprehension strategies modeled and demonstrated for him. I would reread what he had read back to him and ask him, "Does that make sense? Does it sound right?". Initially, he had trouble determining if a word in a sentence sounded right or made sense. He needed to develop an awareness of what the text said and that what he was reading had to make sense. He needed to learn to think about what was going on in a passage and use his personal knowledge, his understanding of what was going on in the story and the surrounding text to help him out. It was evident from his initial score on the Alberta Diagnostic Cloze test that Rusty did not make use of, or integrate, what he knew to fill in missing words in text. It is possible that Rusty has limited exposure to cloze type activities, so this may have impacted his performance on the task. Rusty had a difficult time with the activity and he required a

lot of time to complete the task. I finally had to make the decision that he was finished, even though he was not completely finished the task.

In response to the instruction, Rusty was quick in starting to develop an awareness of what he was reading. He soon began to pause or stop for unknown words and errors. While he was developing this awareness about what he read, he was still unsure about what to do about it. As discussed previously his only answer to figuring out hard words was to sound them out. However, he had no deep concept of what that was or how many ways it could work. Again, I relied on the process of scaffolded learning to show him new strategies, help him apply those strategies and then give him feedback on his effective use of strategies when he would use them independently.

When he would self-correct or return to an error I started by asking him, Why did you go back? Why are you fixing that up? In the beginning he often could not express the exact language. I would then repeat what he had read and ask him, "Did it sound right, make sense, look right?". Over time he slowly began to be familiar with these terms and was able to say if something did not make sense. He had more trouble determining whether or not substitutions sounded right. I would respond to his use of correct strategies by saying, "I like the way you went back and reread that sentence to make it make sense". So he knew exactly what he had done right. Research shows that unless students are getting feedback that their use of strategies are working they will stop using them because they do not see the effectiveness of using the strategies to support their learning (Garner, 1992; Irvin, 1998).

One day I witnessed Rusty thinking about self-correcting and trying to apply some strategies on his own (Lesson, 09/ 13/ 00). He was stumped by the sentence, "Mom plugged in the kettle for a cup of tea." While he was not exactly sure what he needed to do to read the sentence correctly he demonstrated an awareness that he had to do something to repair his first attempt. He stopped and tried the word puggled, then paused for about five seconds as if he knew it was

wrong. However, he continued reading without an appropriate fix-up. After reading, we went back and I modeled a new strategy for him to use. I reread the sentence leaving out the two words plugged and kettle. As soon as he heard me read the sentence with the blanks he was quick to get the word plugged; kettle still stumped him. So we continued to work with the sentence to figure out what you would plug in to make tea. When I asked him what was wrong with the words he had put in, he was able to tell me that they did not make sense. Eventually he was able to verbalize why he would reread and fix-up a passage.

One of the things I knew I had to be careful of when helping Rusty become a more strategic reader was to use a variety of strategies. I did not want him to rely solely on working out words which was what he had started to do now that he was attending more to the text. Rusty was putting too much emphasis on decoding words; he needed to realize that he could integrate strategies to make decoding faster and have less sacrifice of speed and fluency which equals meaning. He needed to learn that there were other strategies that would work to help him. He needed to develop a crosschecking system that would help him quickly verify his predictions as he worked. This would make him faster at his reading, which would help maintain comprehension of the overall text.

The first lessons involved a lot of modeling of different ways for Rusty to help figure out words in context and to fix-up errors. I began to see application of this learning after about ten lessons. Rusty was demonstrating more evidence of awareness of errors and attempts to fix them. When he approached an unknown word he would stop or pause. He usually needed a reminder to try a strategy other than sounding it out. He was starting to reread sentences or parts of sentences and would sometimes slow down his pace, or read silently on the second try (Lesson, 09/14/ 00).

One strategy that we really worked on was to have him skip the word, read on, then come back and think about what would fit. In doing this Rusty needed reminders to be thinking about what the author was trying to tell you and what was

going on in the story. Rusty soon began to attempt to use this strategy on his own, with me there for support or feedback. He would take a pause then I would see his eyes and lips move as he read to the end of the sentence and come back to the word. This interaction demonstrated scaffolded instruction within Rusty's zone of proximal development. He was learning to try and apply new learning on his own knowing I was there to support him.

One of the days he tried this, it was with a tricky substitution; the word searched, for the word scanned. When Rusty saw the word he could not read it, so he tried "the read ahead and return strategy" to figure it out. When he came back he had a puzzled look on his face which told me he was probably not really confident with what he had read. In post-reading discussion I got the distinct impression that he was still not sure what made sense or sounded right. This was a tricky one because his substitution did make sense and did not impact the meaning of the story. Perhaps he was thinking that he knew the actual word was wrong, so how could it sound right and make sense (Lesson, 09/25/00)?

Midway through the lessons Rusty was demonstrating more independent self-corrections in his oral reading. He was becoming faster at identifying when words did not sound right in text and was beginning to reread text to help him figure out the words. He still needed some support, with some words, to work them out. Rather than always giving him clues about the word he was stumped on, I started to encourage him to read ahead and come back to the word before he tried to work it out (Lesson, 10/03/00). In the September 28 lesson, Rusty made an interesting statement to me about his reading. He commented after he had finished his oral reading for the day that, "I didn't get that much wrong." This was a positive comment for him to make. It showed me that he was starting to view his reading in a new way and that he was becoming more concerned with accuracy and self-monitoring of what he read.

Affect

Affect is the component of reading that takes into consideration a student's attitude, motivation and perceptions about reading and learning. Worthy, Moorman and Turner (1999) state that middle school students are notorious for having negative attitudes about reading (p.12). This negative attitude can become even more of a challenge for students who struggle daily with basic literacy tasks. Reading becomes a challenge, it shifts from being a pleasurable activity to hard work. In fact many children that struggle with reading have a difficult time being able to read for pleasure and some give up on the task altogether.

Rusty's attitude towards reading and his perceptions of himself as a reader was an area that showed improvement over the ten weeks I worked with him. Since there is not a specific test I know of that measures student affect, changes in affect can only be inferred through observation (Mizokawa & Hansen-Krening, 2000). In addition to my observations I was able to gather information about affect from both the parent and student exit evaluations of the project and from my exit interview with Rusty. All data points in the same direction; to the fact that Rusty became a more motivated and successful reader who read with confidence and felt positive about his new gains in reading.

In my day-to-day work with Rusty I slowly began to notice changes in his behavior although from day one he was always motivated and enthusiastic about the time spent together. I saw him gain confidence in the new strategies he was learning and saw him begin to take risks in attempting to apply his new learnings independently. Rusty's classroom teachers also commented on changes they observed in class such as his willingness to read independently, wanting to read aloud in class or with other students, making more appropriate book choices and success in the home reading program.

Rusty's parents' exit comments were positive. His parents reported that they were very pleased with his progress over the ten weeks. They commented on the exit questionnaire that they now perceived his reading as being above average.

Originally they felt he was a below average reader. They also commented that Rusty was excited about reading and more confident in his abilities (Parent Questionnaire, 12/14/00). When asked to further comment on changes they observed they wrote, "Rusty's changes are extremely positive. He has learned to break words down. He is committed and very interested in the books he reads. Homework assignments are not a problem. Rusty is now reading novels which makes him proud, us as well. He has become an excellent reader" (Parent Questionnaire, 11/23/00).

The true reflection of affect comes from Rusty himself. He was very proud of his gains. In one of our last lessons he arrived feeling very pleased with himself because he was very smart in his guided reading group and the others wanted to all work with him (Lesson, 11/17/00). He was also motivated to extend and share his work from the lessons with the class. At one point as part of expository reading we were focusing on reading about Alberta. This was going to be the upcoming social studies focus for the class. Rusty was so keen to share all the information he had learned with the class that he took his writing book home and on his computer he created an information book about Alberta which we had published for the class library. He took the activity one step further by developing a test for the class. It was amazing to him so keen and confident to share his knowledge with his classmates.

On his exit questionnaire when he was asked to tell how he had changed he replied, "I have improved in my reading because I got a lot more strategies to use." In our interview he said the best part of the lessons was that he was reading harder books and the part of the lessons he enjoyed most was the reading. He followed this up with the comment, "I just like to read. Last year I was so-so in my reading and this year I just don't want to put a book down." (Interview, 11/23/00).

At the end of the one-on-one program, Rusty was a more motivated and confident reader. Now, he is positive about learning and about the skills and abilities he has to help him. Reading and learning are no longer such a struggle for him. He feels that he is working successfully and perceives that he is near the top of his class.

This positive attitude will do a lot to keep him motivated and involved with his learning.

Exit Assessment Results

Overall I was initially disappointed with the growth that Rusty demonstrated in the area of comprehension. Based on the informal assessments (See Table 2) he made approximately a one grade level increase. On the Jerry John's Oral Reading passage he went from reading at a grade five instructional/ independent level to reading at an independent grade five level. He was also able to read the grade six passage at an instructional/ frustration level. In addition to providing more accurate and detailed responses to the questions his retelling also showed marked improvement. It is important to note that his word recognition and fluency on the exit testing had also improved. His word recognition on the grade five passage had improved to an instructional/ independent level. His exit level reading showed that he was more aware and conscientious about what he was reading. He attended more carefully to words in text and attempted to self-correct his miscues. His self correction ratio had dropped from 1: 13, to a 1: 5.

His exit scores on the Holistic Rating Scale for Oral Retelling (Appendix E) showed much improvement. He progressed from a rating of two, to an exit rating of between four and five. His exit retelling was in sequence, detailed and he used the names of characters in the passage. In assigning him a score on exit retelling, I determined his score to fall between a four and a five. When I read the descriptors I judged his reading behavior as more reflective of a four for the first part of the criteria; the reading demonstrated supported, concrete and simple, abstract meaning. The second half of the descriptor for five was more appropriate; language from text is frequently used to relate plot, characters, events or information.

Rusty's reading of the cloze passage showed minimal improvement from entrance to exit. He only showed a 9% increase in his scores. I did notice that it took Rusty less time to complete the activity and that he appeared to have more

confidence in approaching the activity. In considering these scores one must take into account that completing cloze types of activities is not a common activity for most students. Therefore, unfamiliarity with the task may have had an impact on the score. In general I think the improvement is reflective of Rusty's reading. While he had developed some excellent strategies over the course of the program, the one strategy that appeared to need prompting right up to the end was to read around a word and use the context to help out. He did demonstrate success with this task in lessons once he was reminded to apply the strategy.

I feel the most important gain Rusty made in the area of comprehension was in his development and awareness of strategies and how using them can assist him to better understand what he reads. In the beginning of the lessons, Rusty was a non-strategic reader in all areas. He did not know how to approach new words in text; he did not self-monitor; and there was virtually no attempt in his reading to correct his work. When he read, he read and his goal was to get through it quickly. Rusty has developed a basic repertoire of strategies to help him in all areas of his reading. He has developed the sense that reading is making meaning from what the words on the page say and that if that meaning gets muddled, there are strategies he can use to try and repair his reading so it makes sense.

I was initially disappointed with Rusty's progress because he had not made the two years of growth that is the anticipated average for participants in the Later Literacy© Program. When I reflected on Rusty as a reader before and after the program I felt more positive about his progress. In the area of comprehension he had started as a student with minimal strategies for helping him to read and understand text. At the beginning of the program he required a high level of support to learn about reading comprehension strategies. As the lessons progressed he began to attempt to use strategies with support. He began with an awareness that he needed to apply a strategy, but often required a direct prompt and some support to be successful. Near the end of the lessons he had become more successful and was moving towards independent strategy use. He had changed his

understanding of reading. Reading was no longer reading to the end of a passage as fast as possible; it had become a meaning-making activity. Rusty was able to apply strategies and monitor his reading so his overall understanding of what he read improved. He truly responded to the support that scaffolded instruction provided in the lessons. It gave him a safe and supported environment to learn and try out new strategies plus, it provided him with feedback on how well he was selecting and using strategies. While Rusty's progress may not be accurately reflected by the assessments he has developed and improved as a reader, the strategies he learned will hopefully continue to support his reading in the future.

Impact on Written Expression

Reading-writing Relationship

The acts of reading and writing are closely connected and they depend on many of the same cognitive elements (Shanahan, 1997). Given that they are so connected it is expected that changes and growth in reading will have an impact on written expression (Gordon et al., 1998; Irvin 1998; Shanahan, 1992, 1997; Tierney & Shanahan, 1991). This was determined to be true when Rusty's improvements in word recognition and phonemic awareness supported improvement in his spelling. The same pattern was seen when the content of Rusty's exit writing sample was assessed.

The changes in Rusty's ability to make meaning from text, understand vocabulary, recognize text structure and self-monitor his reading all had an impact on his written expression. As a reader Rusty became more aware of understanding the message in text. Consequently, his better understanding of text enabled him to write a passage about that text that reflected his understanding. Rusty's improved understanding of text and text structure also enabled him to write more sequenced passages. He had learned from the reading to provide important information and to support his thinking with specific details.

Writing is an interpersonal activity and as such a writer needs to have consideration for the audience they are writing for. It is important to try and make written messages clear for those people that will read them. For Rusty improvements were made in his clarity of communication not only through his improved understanding of what he read but also through his self-monitoring ability. In reading Rusty had learned to always monitor if what he was reading sounded right, and made sense this learning was transferred to his writing. As a writer he became more consistent with rehearsing what he wanted to write and checking his written work for clarity. This awareness enabled him to write clearer, more organized passages that were both easy to read and understand.

When students learn about skills and strategies that help them to become a better reader they are also learning something that will help them improve their written expression (Shanahan, 1992). This connection between reading and writing was definitely evident in Rusty's exit level writing.

Assessment Results for Writing

For the program, the Summary Writing Activity was used to assess entrance and exit level writing. The Summary Writing activity is a short, written response that summarizes the instructional level, oral reading passage the student has just read. After the student has read and retold the events from the text he is then asked to write a summary about what he has just read. The Summary Writing activity is scored using the Holistic Scoring Scale For Writing (Appendix F)(MacDonald, 1995).

The Holistic Scoring Scale for Writing (Appendix F) consists of six descriptors of writing that range from a one, up to a score of six. Each descriptor contains a sentence for assessing content and one for conventions. On his entrance writing sample Rusty's writing was scored at a descriptor two for content and a descriptor three for conventions.

The writing of a student rated as a two for content shows that the student's

work reflects the construction of concrete meaning and is expressed in simple or run on sentences (MacDonald, 1995). Rusty's entrance writing sample shows exactly these characteristics. He was able to write about what had happened in the story in a very basic and simple way. The writing was not in a sequenced order and jumped from events at the beginning, to events at the end. The composition would be difficult to understand for someone who was not familiar with the passage. Many of his sentences were short simple sentences. The rest were run on sentences in which he tried to express one or more unrelated ideas in the same sentence. For example, "The skied bord wor a blake hood and Ken solved the mestry and the skied bord was very good at tricks" (Student Work Sample, 08/28/00).

The writing of a student with a three in conventions reflects the ability to use basic punctuation appropriately, to spell most words conventionally with approximations of words being close to standard spellings. In this area Rusty's writing showed that he is able to use periods correctly, although his sentence structure was not strong; the sentences he had written all were marked by a period. His spelling accuracy was 61% on the passage.

At exit Rusty's writing had shown improvement in both content and conventions. His exit score was a descriptor four in both content and conventions. Writing that reflects a score of four in content shows that the student's writing is organized, logically sequenced and includes a variety of sentence types. Rusty's exit piece was very well-organized and sequenced in a way that provided valuable information to the reader about the character and the events in the story. It reflected a better understanding of the piece by the writer. The writing also demonstrated better control over sentence structure. The sentences were all complete sentences and there was some use of variety to reinforce information from the story.

A conventions score of four shows the student has flexible control over basic language structures. In his exit piece Rusty demonstrated accuracy with use of periods, capitals and even apostrophes in his work. His spelling accuracy in this piece was 93 % accuracy.

Summary

This chapter examined at some of the theoretical underpinnings of reading comprehension. The cognitive, affective and transactional models of comprehension were discussed. This was followed by a look at Rusty's progress in the area of reading comprehension. His progress was measured through entrance and exit assessments and daily observations as we worked together through the lessons. The main areas examined in the chapter were his improvements in reading comprehension, strategy use, affect and written expression.

An important part of reading comprehension that was not discussed in this chapter, but is closely linked to strategy use, was metacognition. Metacognition is thinking about your thinking. It is an important component of strategy use because in order for strategy application to become independent, students must develop the capabilities to think about learning tasks and regulate, evaluate and monitor their strategy use (Wilson, 1995). Metacognition and metacognitive strategy use help promote more active and engaged readers. Therefore, metacognition will be discussed in the next chapter.

CHAPTER FIVE: METACOGNITIVE DEVELOPMENT

The previous chapters have examined the cognitive processes of reading; fluency, decoding, word recognition and comprehension. This chapter is going to examine metacognition. Metacognition is cognition about cognition, or thinking about your thinking (Garner, 1992; Irvin, 1998; Snow et al., 1998; Wilson, 1995). It occurs with children and adults alike and is present with both academic and non-academic tasks (Garner, 1992). While metacognition is an integral part of all learning, this chapter will narrow the focus to examine metacognition as it relates to the reading process.

Metacognition, like all reading processes, is developmental and occurs along a continuum (Butler, 1998; Cox, 1994; Irvin, 1998). Children and adults both have the capability to be metacognitive but at different levels of sophistication with different types of tasks. A person's metacognitive knowledge will develop slowly and gradually over time and with a variety of learning experiences (Flavell cited in Garner, 1994). Irvin states that because metacognition involves abstract thinking abilities it is not generally "fully" developed until about the age of 15 (p. 168). Children that struggle with the reading process generally demonstrate lower levels of metacognition than their more successful peers (Butler, 1998; Wilson, 1995). These students are so focused on the process of reading, in addition to being faced with significant challenges, that they are often unaware of when there is a breakdown in the reading process and often when they do recognize it, they do not know how to fix it up.

Metacognition is an important part of creating a successful reader. It gives students the ability to assume more control for their reading and learning by developing and improving their strategic awareness of reading. However, it is not just enough to be aware of metacognitive processes; to become a more successful reader and learner a student must become independent at regulating, evaluating and monitoring their thinking processes (Wilson, 1995).

The development of metacognition was one of the anticipated outcomes of the one-on-one sessions with Rusty. To assess his metacognitive awareness at entrance and exit from the program, the Metacognitive Strategy Index (Cassidy Schmitt, 1990) was used. The Metacognitive Strategy Index (See Appendix C) is a 25 item questionnaire that was designed to assess middle and upper elementary students knowledge of strategic reading processes with narrative texts. The questionnaire looks at behaviors students use before, during and after reading. While the Metacognitive Strategy Index is shown to be a reliable measure of a student's metacomprehension strategy awareness, it is difficult to tell from the survey whether or not the students actually do what they say they do on the survey when engaged in reading; that is, it does not inform us about the "repair" or "regulate" ability of the student.

Garner (1992) gives three reasons why children may have difficulty discussing or acknowledging their metacognitive behavior. The first is that for some students the task may be so automated for them that it is difficult for them to think about breaking the task into parts and then discussing it. Secondly, some students may have low verbal skills and not be able to talk about or clearly express what it is they do as they read. Being able to step back and reflect on personal learning is an abstract activity which can make it difficult for a student to discuss in concrete terms. The final reason is that in some cases students know what they should say or should do and it is this that they report. In this scenario they may have the awareness but it is not part of their repertoire.

This makes teacher observation and informal assessment an important part of determining metacognitive functioning in a student. Through more practical based assessment, the teacher will be able to clarify what strategies the student can and does use and which ones they may be aware of, but not be using in daily reading.

For the administration of the survey I chose to read the questions and responses to Rusty. This way I would be certain that he had understood all of the

questions and responses and that he would be able to use his attention to focus on his responses.

Entrance Scores

On the entrance survey Rusty showed weakness on the responses for before reading. He had a score of 3/10 responses correct. In reviewing his responses it was very telling about what Rusty felt was important in prereading strategies. Many of his responses were centered around knowing words. For example some of the strategies he highlighted as important in prereading were: to sound out the words he did not know, make a list of the words I am unsure of, think about the meanings of words which have more than one meaning and to make sure I can pronounce all the words (Cassidy-Schmitt, 1990, p. 459). These responses reflect what concerned Rusty and what his biggest reading challenge was, the big words. His responses reflect he has the metacognitive knowledge that the words in the book are difficult for him, but at the same time reflect a weakness in prereading strategies.

When reviewing the responses related to strategy use during reading Rusty had a score of 9/10. However, after having completed the assessment process and from working with him for only a few lessons, I believed that his responses in this section reflected things he was aware of from class instruction and knew he should do, but did not use in his daily work. In fact after reviewing his responses on the survey I made a note to myself on the back of the questionnaire that said, "Many of the strategies he chose are not at this point observable reading behaviors for him" (Field notes, 08/00). When I reviewed the nine correct responses six of them were not used in his work and two of them were inconsistently used in his work. The strategies that were used inconsistently in his work included checking to see if the story made sense and making a lot of guesses about what will happen next (p.460). Occasionally Rusty was able to tell if what he read did not make sense.

However, many of the times he would recognize this he was unable to consistently apply fix-up strategies. Most of the time he paid no attention to his errors and just kept reading. With making guesses about what would happen next, he was able to do this when asked. However, I did not get the impression it was part of his independent reading behavior. Also, his guesses were often totally unrelated to what was going on in the story. Sometimes he would use his background knowledge to make a guess but without considering what had already happened in the story and what would fit with upcoming story events.

The same pattern was evident with the after reading questions. He scored 5/5 on the responses but his reading behavior reflected none of the strategies in practice. Rusty was able to retell main points of a story after reading but not in sequence and sometimes leaving out important information. He demonstrated no aesthetic connections or responses to text. He did not connect what he read to his own experiences or other texts he was familiar with without mediation.

The results showed that Rusty had some metacognitive awareness about the reading process and his strengths and weaknesses as a reader. As a teacher I knew that it would be important for me to try to move this awareness into Rusty's independent reading behavior. This would be a big job since Rusty was not a very strategic reader with any of the reading processes.

Exit Scores

The exit scores on the Metacognitive Strategies Index (Appendix C) showed a shift in Rusty's perception of the strategies used before, during and after reading. The scores were interesting in that the before reading score stayed at 3/10, during reading dropped to 7/10 and after reading dropped to 3/5.

On the questions that surveyed before reading strategies his score remained the same. However, he did change some of his responses to the questions. The change in his answers reflected a move away from a focus on the words and showed that Rusty was more preoccupied with if what he was reading was making

sense. He checked off answers such as check to see if the story is making sense, check to see if I have read the story before and check to see if I am understanding the story so far (p.459).

With the during reading questions, a closer look at his responses provided some excellent information about what Rusty may have been thinking. While his score was two less than at pretest his answers did reflect some of the learning that had taken place throughout the lessons. By his first incorrect response he just seems to show his confusion about where to draw the line from before reading to during reading, especially since we had talked about using chapter titles during reading to help you predict confirm and reflect on the text. For the question, "While I am reading it is a good idea to", Rusty responded, read the title to see what the story is about.

His other two responses while also not fitting the desired response for the questionnaire do reflect changes in his thinking as a result of what he had learned and what had been reinforced through the lessons. He responded that during reading it is important to try not to confuse what I already know with what I am reading about and that it is important to reread to be sure he has not missed any of the words (p.460). The first response is a huge acknowledgement for Rusty. It shows that he is aware of the fact that sometimes when he would read he brought in experiences or prior knowledge that really did not relate to what he was reading. Recognizing this will benefit him in the long run. Hopefully he will become more critical of what background knowledge and information he applies to what he reads and this in turn should help improve his comprehension of what he reads. The second response reflects his new found importance on reading all the words in a text with accuracy and his developing ability to self monitor and correct his reading when needed. This is also an important part of what good readers do during the reading process. They need to make sure they are reading and monitoring as they read. For Rusty this is a significant admission since at the beginning of the program attending to words in text, self-monitoring and self-correcting his reading were minimal.

Rusty's responses to the after reading part of the survey were similar to the during reading section. His total score was lower than at entrance but his answers reflect a better knowledge and understanding of the reading process and use of strategies as well as an understanding of himself as a reader. It is interesting to note that the two incorrect responses were with the questions that addressed aesthetic response to text. Rather than making personal responses to the text Rusty indicated that after reading it was more important to look up big words in the dictionary and to make a list of the things he understood most in the story (p.461). Again, these are not the desired answers to the question but they do reflect Rusty's changing and developing understanding of the reading strategies and himself as a reader.

Changes In Metacognition

The results of the entrance and exit Metacognitive Strategies Index, interviews, observation and interaction with Rusty over the 10 weeks shows that he is on his way to becoming a more metacognitive reader. Metacognitive knowledge includes knowledge of person, task and strategies. His metacognitive development can be examined in two areas. First, his understanding of himself as a reader and second, his ability to apply appropriate strategies to support his reading.

The results from the Metacognitive Strategies Index show that there was a change in Rusty's metacognitive knowledge over the course of the ten weeks of one-on-one. Metacognitive knowledge is relatively stable and is storable information that grows with a child's years of experience in thinking (Garner, 1992). It is evident from Rusty's responses that Rusty had learned some very specific information about himself as a reader and the kinds of things he feels he needs to do to be more successful. On a personal level Rusty developed an awareness of his strengths as a reader. He also became more knowledgeable and confident in his approach to the task of reading. He was aware of what tasks and demands may be more challenging for him and what he could do to better accomplish the desired

outcome. This is a positive shift from the initial survey where many of his responses appeared to be chosen because he thought it was the right answer or what a teacher would want to hear and many of the responses selected were not observable in his reading.

Another significant improvement for Rusty was his increased awareness and ability to use strategies in his reading. He had developed from a student that used minimal strategies with reading to a student who was able to implement a few strategies successfully and independently in his reading. Rusty has not yet mastered independent strategy use and did require on-going support to be consistent in using his strategies. The level of support or prompts that were used to cue him were very low level prompts. In most situations all he needed to go back and fix an error up was the prompt, "try that again". In most cases he was then able to reread the text, fix-up the error and was able to verbalize why he had to go back and what he did to fix-up the mistake.

While the program helped Rusty make some important gains in the area of metacognition I think he still developing his metacognitive awareness and skills. He has developed an increased awareness of his active involvement in his reading. He is aware of strategies that he could implement to help him both monitor and repair his reading. However, as Garner (1992) states knowledge is not use. To become a more effective reader Rusty must become more confident and consistent with applying what he knows. During the program we spent a lot of time working on improving his word recognition and fluency. Once we started to see improvement with this, he had more attention and energy to focus on other aspects of the reading. Metacognition is a higher level skill, one that is easier for more proficient readers. I am hopeful that with the gains he has made, his new found joy of reading and some consistent teacher monitoring, that Rusty will continue to develop his skills in this area.

CHAPTER SIX: DISCUSSION

The completion of this research project has been a learning experience for me personally and professionally. I thoroughly enjoyed the daily work I did with Rusty and it was a reward to observe growth and confidence in his literacy learning abilities. I sincerely hope all that he learned he stays with him and continues to keep him a motivated and enthusiastic learner.

Professionally this project helped me in both my role as a teacher and as a student. I learned a great deal about the plight of the middle school student, particularly for those, like Rusty, who struggle as a learner. In addition to increasing my knowledge about literacy learning I also had existing knowledge and beliefs about quality teaching practice reinforced. This experience has not only been a benefit to Rusty but will continue to benefit all the students I work with in my classrooms.

As a student this project has opened my eyes to the rewards and complexities of engaging in research. I was quick to discover the many important aspects in doing case study research and have learned many things that I would do differently if I was to complete another research project.

One of the first things I learned about qualitative research was how overwhelming the amount of data collected can be. As an inexperienced researcher I embarked on this project fully expecting to collect, analyze and interpret data on all the literacy aspects of the program. I had planned to collect data on reading (word recognition, decoding, fluency, comprehension, strategy use and metacognition), writing (content, organization, conventions, spelling, strategy use and metacognition) and changes in affect. It did not take me long to realize that to attempt to do such a large scale research project was beyond the scope of my novice capabilities. At that time I decided the primary focus of the paper would be changes in Rusty's reading, primarily of narrative text.

Revisiting the Research Questions

After narrowing the focus of the research the objective of the study was to examine the impact the daily one-on-one reading intervention would have on literacy skills in the area of reading. The reading processes that were specifically explored in the chapters included fluency, decoding and word recognition; comprehension and metacognition. These reading processes are so interconnected that at times it was difficult to separate and address them independently. Revisiting the questions now gives me the opportunity to discuss my findings in a more holistic manner as well as to address Rusty's transfer of skills from our daily lessons to his classroom. The limitations and implications of my research will also be discussed.

Rusty and I worked together on a daily basis from August 29, 2000 to November 17, 2000. In that time we completed 43, one-on-one lessons. I was very fortunate to have had the opportunity to work with such a pleasant, enthusiastic and highly motivated student. It ensured that my job was easier and I looked forward to meeting with him everyday. His positive attitude and work ethic, I am certain had an impact on the results. He arrived everyday smiling and ready and wanting to learn.

I discovered as part of the entrance testing that Rusty was very aware and realistic about his literacy strengths and weaknesses. In our entrance interview he told me he was a pretty good reader and that he liked to read in school and at home. One of his goals was to read bigger books, like chapter books, and he thought the hardest thing about reading was the big words (Interview, 08/28/00).

The results of the entrance testing highlighted the major areas to target for remediation. Rusty's ability to decode words was very weak. He lacked the phonemic knowledge to attack multisyllabic words and words with complex patterns. In addition to this he had minimal working knowledge of strategies he could apply to help him work out new words. His comprehension was at a very basic level. He could retell main events from a story, but not in sequence, and his responses to

questions were often non-specific or very general. Inferencing and synthesizing questions were difficult for him to answer. With his reading comprehension Rusty also had a limited repertoire of strategies to use to aide his understanding of what he read. Metacognition was limited.

While each of the three components, word recognition, comprehension and metacognition were discussed in separate chapters it was very interesting to watch the interaction of these processes in daily lessons and to observe the combined impact they had on Rusty's reading ability. The changes in Rusty's reading behavior were made more powerful because of the direct, explicit, supported and responsive type of instruction I was able to provide. After completing the entrance assessments I was able to meet and address Rusty's individual needs exactly where and when he needed them. While daily lessons were planned, I was also able to respond and interact with Rusty as I needed to during instruction. This kind of instruction and interaction made Rusty's 'Aha' moments very rewarding and motivating to watch.

As we worked through the lessons it was easy to observe Rusty's improvements in decoding and working out words. He moved from successfully decoding simple one and two syllable words to decoding multisyllabic words independently. He progressed from doing this in the word work part of the lesson to being able to do this in context. As he made the transfer from isolation to context it was evident that he was not only able to apply decoding strategies to assist him but also comprehension strategies. He moved from being a reader that just jumped over large words in context without a second thought to one that realized all the words were important and that he had both the skills and strategies to do this efficiently.

Along with the improvements in decoding came an improvement in oral reading fluency and Rusty's ability to monitor and self-correct what he had read. The impact of these changes provided him with more attention to focus on his interaction with the text. In observing these interactions I also began to notice Rusty using

some self-talk to monitor his reading. He would often pause with a puzzled look on his face and say, "Huh?" or stop and say, "That doesn't sound right" then go back and apply a fix-up strategy to make it make sense. When he independently made these changes I would question him about why he did what he did, trying to develop his metacognitive awareness. Over time he went from being unsure about why he made adjustments to being able to verbalize his reasoning.

Even though I did not have the time or resources to fully examine the impact of the one-on-one instruction on written expression, improvements in organization, content, conventions, spelling and strategy use were evident.

The over-all growth in the area of reading was promising for this relatively short-term intervention. The growth was measured not only by test scores but also through observable affective changes in Rusty. The assessment results show growth of three years in sight vocabulary and approximately one year in reading comprehension and spelling. The improvements were noticed by Rusty's classroom teachers, his parents and by Rusty himself. While he entered the program with a positive attitude towards literacy learning, he developed a great deal of self-confidence in himself as a learner and was very, very proud of his accomplishments.

While Rusty's literacy learning growth in the daily lessons was positive it was important to investigate to what degree he was taking these new skills and strategies with and applying them in his classroom.

Limitations of Study

While the results of this research project showed promise for the student that I worked with, there are some limitations to the study. The study is limited by being a single subject case study, the nature of the student selected, the framework of the tutorials and the emphasis only on reading. Being an outside investigator (working with Rusty only outside the classroom), also limited where I could go and what I

could see and do. The final limitation of my research that will be discussed is the transferability of skills to classroom learning.

Limitations of a Single Subject Case Study

Completing this case study with only one student gave me a very narrow perspective on the possibilities of the program. I was only able to observe and comment on progress with one student. The results of the research while being positive for one student may not provide enough information about the success of the program to inspire others to consider implementing it in their school or district.

The data gathered and reported in this paper compliments the information that was gathered by Denyse Gregory on the Later Literacy© Project in Scarborough, Ontario. Her research was quantitative in design and used a sample of twelve students. While my research is qualitative in nature and only looks at the results for one student I was able to capture more of an essence of the progress and growth through the daily one-on-one with Rusty.

Currently there is an evaluation of the Later Literacy© Project here in Calgary. This evaluation will examine the growth of approximately 112 division two and three students (some identified as being as learning disabled and some identified as struggling readers) from Calgary schools. While this information will be more quantitative in nature, its results may be positive enough to encourage more schools to engage their teachers in the training, so the program maybe implemented in their schools for their students.

Limitations of Working with a Learning Disabled Student

A second limitation of this study was my choice of student for the project. Rusty has been identified as having a learning disability. He is coded 54 by Alberta Learning and is on an Individualized Program Plan (I.P.P.) to meet his specific learning needs. Learning disabled students can be complex learners and as a result can present some very unique challenges that influence the way they learn. Some of

the challenges may include processing speed, visual-perceptual problems, auditory, short and long-term memory, language delays, fine motor problems and attention concerns. Since Rusty is a learning disabled student some of these factors may have impacted his progress. As a result, the exit results for Rusty may be lower than the students that were used for the evaluation from Ontario. This does not mean that the program was less effective for him. What I had hoped to demonstrate was that the program could work for a child identified as having special needs in literacy learning. I wanted to show it is a program that can be successful with all types of students as long as they meet the selection criteria.

In education there is a growing belief that a significant number of students that are identified as being learning disabled are really reading disabled (Spear-Swerling & Sternberg, 1998). These students have been identified and referred for reading problems. In my experience working with learning disabled students, I have found this to be true with only some students. Many of the students I worked with had reading difficulties and once their ability to read had been improved they were able to return to their community schools and function successfully with minimal support. In my experience there is only a small number of the students I have worked with where you really see a learning disability.

Limitations of the Instructional Framework

A third limitation of the program was my conflict with the instructional framework for the Later Literacy© Program. A requirement of the program is that you follow the established structure and use the approved materials so that the program is kept pure across settings and students for consistent evaluation and comparison on of the data. While the framework is effective and addresses the unique needs of both adolescent learners and the individual student it can sometimes be a challenge to follow.

Again, it is possible that my difficulty staying with the framework relates to the fact that I was working with a limited literacy, learning disabled student. Also, once I

was working with Rusty I noticed that he needed more attention in some areas than others. For example the first part of the lesson, narrative text, is only supposed to take ten minutes of the lesson. There were days when mediating understanding and vocabulary of what was read took longer than this time. Knowing it was such an area of need made it challenging for me to consistently observe the prescribed time length. In reflection I realize that my questioning and teaching during this part of the lesson primarily addressed the more cognitive aspects of comprehension at the expense of the affective and aesthetic domains. In some ways I suppose this provided a challenge to me as a teacher to really evaluate his needs and teach to them more efficiently. For the next student I work with I will be more aware and intentful of trying to develop the affective and aesthetic domains of reading along with the cognitive. Especially since I feel that students that struggle with literacy need to have these areas developed.

Limitations of Emphasizing Reading

It was unfortunate that my research ended up focusing mainly on reading. Initially, I had planned to do an in-depth review of reading and writing as part of this project. However, as I began to analyze the data upon completion of the project, there was simply too much there. I had to make a decision, and that decision was to focus on reading. From the data, there was information on written expression, spelling, expository reading and affect that I just could not deal with adequately in a Masters study. Consequently, this paper only discussed one of many areas, narrative reading and the many components that work together to make it successful. There is probably enough information from working with one student and the research base available to do another case study and just focus on one of the components that were omitted.

Limitations of Being an Outside Investigator

Another limitation I found in my research was being an outside investigator.

As a researcher I only had limited access to Rusty and the work that he was doing in his classroom. I was only able to interact with Rusty during our daily lessons. I was not able to provide on-going scaffolding to encourage independent use of strategies or to help him make connections across learning in the one-on-one and learning in the class. Being able to have this daily interaction with Rusty across all learning would have been a powerful way to boost his growth and help him internalize many of the strategies he learned. Being able to have this daily involvement with Rusty as he was involved in different learning tasks would have helped promote transfer of learning from the lessons to the classroom.

Another limitation I had as an outside investigator was limited access to Rusty's daily work. This access would have been particularly helpful in collecting a broader range of information to assess his reading and writing. I would have had access to running records, reading logs, home reading activity, journals, writers notebooks and any other information that may have been valuable in monitoring his growth and progress. This information would have enabled me to do a more thorough assessment of his growth in written expression, rather than using one specific sample to assess his growth.

Limitations of Transfer to Classroom Learning

An important part of the program that needs to be considered is how well, or to what degree the learning from the one-on-one lessons being transferred to daily learning within the classroom. A goal of the program is that the student will be able to learn and internalize the strategies they learn in the tutorials so they can apply them independently in other learning situations. As an outsider, not a teacher, who works with Rusty on a daily basis, it was difficult for me to monitor how well he was applying new strategies and what strategies he was attempting to use on his own.

After lessons 10, 25 and 43 when Rusty was interviewed about his perceptions of the lessons and the impact he felt they were having on his learning, he responded that he was using the strategies in his school work. When prompted

to be more specific about which ones he used, he provided a generic one, sounding out words. To observe what strategies he was using, I observed his behavior carefully as part of the five classroom observations (Appendix B). The most relevant information about Rusty as a learner was gathered watching him work in his guided reading group.

What I discovered was that of the skills and strategies he learned in reading, working out words and self-monitoring appeared to be the most consistently used. His Guided Reading teacher commented that Rusty was able to decode unfamiliar words, that he made good use of decoding strategies and that he would reread text when it did not make sense. Running records of Rusty reading to his classroom teacher also reflect his ability to work out words and to self-correct as he read.

In the area of writing and spelling it appeared there was less transfer of strategies. One of the writing strategies that was reinforced as part of daily writing was to have Rusty flip his pencil over after he is finished writing a sentence and then say and check each word that he had written. I did not see him do this during any of my observations.

Also, with spelling words his work did not reflect that he was thinking strategically or self-monitoring. During my observation he did try to use some strategies such as looking back in his note book and mouthing words as he tried to spell them. However, I got the impression that this was for my benefit and was not an automatic part of his routine. There were errors in his work from words copied off the white board: fram/ farm (Observation, 11/08/00) and pada fasks/ panda facts (Observation, 11/22/00). He would spell words in his work without thinking about what he knew about the word or connecting independently to his learning from one-on-one. For example, he wrote the word fiting for fighting in his book. He knew the word was wrong so went to look it up in his personal dictionary. I intervened at this time to see what he was doing. As soon as I told him that he knew the word fight because the /ight/ family had been one of our pronounceable units he was able to make the connection and spell the word.

With Rusty there is evidence that some of what he learned in the one-on-one sessions was being used in his daily learning. This is more evident with reading rather than writing or spelling. I feel that there would be more transfer of skills if his classroom teachers were familiar with the program and the strategies it teaches. Another option that would likely promote more consistent transfer would be if one of the classroom teachers was also his tutor for the Later Literacy sessions. With this scenario, the teacher would be able to provide on-going reminders and support that would directly connect learning from the sessions to daily learning tasks. Another benefit would be that many of the strategies taught in the one-on-one could be generalized to an entire class or group.

Implications

This research project and the results it has shown are promising for limited literacy, middle school students and the teachers and parents that work with them. The results from the intervention and my experience working with Rusty have implications for instruction in many areas. The first is the instructional implications it has for students; the second, the implications it has for addressing the unique needs of adolescent learners; and finally the implications it has for professional development with teachers and school districts. My research also has implications for further research.

Implications for Instruction

The experience I gained working through this program not only had benefits for the student but benefits for teaching. Working through the research process and being immersed in current research on the topic has reinforced three important factors of good teaching. These are: 1) the realization that the act of reading is not a “you get it or you don’t” activity, 2) the importance of scaffolded learning with students at any age and in any subject, and 3) the importance of direct and explicit instruction.

Reading is a complex and highly integrated process. This is recognized by most educators that work with young, emergent readers. Fortunately, the International Reading Association's Position Statement on Adolescent Literacy (1999) is attempting to reinforce this idea with educators of older students. Unfortunately, many middle school educators assume that students beyond grade 3 have learned to read. However, reading is not a process you either get or you don't. In fact reading occurs along a continuum and the demands on readers is always changing even into adulthood. As a result continual and on-going instruction in reading is needed at all levels (Moore et al., 1999) As we move through the grades into post secondary education and then into the workplace the type of reading we are expected to do is always changing. As reading demands change successful readers are prepared to successfully meet and adapt to these new demands and challenges.

The entrance into middle school is no exception. The way that education is set up now, the nature of reading shifts from learning to read to reading to learn. Along with this shift there are also changing demands in comprehension and word recognition skills for students. As well there is the shift from reading primarily narrative texts, to reading more informational based texts. Informational text has different demands and requires different strategies if students are to be able to work through it successfully and independently. This is particularly true when students enter the junior high years and when the curriculum becomes much more compartmentalized.

It is important for educators to acknowledge these shifts in reading demands and to focus instruction so teachers are better able to address and meet the needs of adolescent readers. Middle school teachers, at any grade, can not assume that all the students in their class have the necessary reading capabilities to be successful. These teachers need to recognize where students are working along the reading continuum be able to more specifically address those individual needs. This needs to be the case whether the teacher is teaching English, science or mathematics. We need to move forward into the paradigm where all teachers teach in such a way as to

make all students literate in their subject area (Gordon et al., 1998).

The Later Literacy© Program is a positive step in that direction. It acknowledges that students in middle grades may be lacking in the basic competencies they need to help them meet the academic requirements of their grade. It recognizes that older students need to learn in a variety of texts. The program addresses the varied needs of the participants by obtaining a very clear picture of the strengths and weaknesses of the reader before the lessons are started. The assessment and observation that is completed before the lessons start lets the teacher know exactly what the student knows and precisely what it is he or she needs to learn. Why focus precious teaching time teaching what a student may already know? Once the student's literacy profile has been established, it is easier for the teacher to meet the needs of that student within the one-on-one context.

Another very important practice that was reinforced for me throughout the research was the importance of using scaffolded learning and gradual release of responsibility, to specifically support the needs of the student. The use of scaffolded learning is one of the key components to successful learning and as a basis for good teaching. When I worked as an elementary teacher everything was taught this way. It was recognized that students needed demonstration, modeling and ongoing support and feedback. It is sad that teaching tends to become "assign and correct" in the older grades. We all need to be reminded that students of any age, learning any new task, can benefit from the use of scaffolded learning. Showing and telling is no longer good enough.

Scaffolded learning provides direct and specific teaching to the student. Depending on the level of understanding and comfort at which the student is working, the teacher will adjust the level of support to meet the needs of the student. The teacher will then work with the student on that new learning to support and reinforce its transfer and promote independent use by the student. For a newly introduced strategy the teacher may have full control of the learning modeling and talking through the process as a way to introduce the strategy to the student in a non

threatening way. From here each time the same strategy is used, the teacher will begin to reduce the amount of involvement he or she has. The goal is for the student to eventually over time assume responsibility and independence. The strategy becomes internalized and automatic for them. It becomes part of their metacognitive repertoire.

The power of scaffolded learning is that it brings teachers back to purposeful teaching and supports students in new learning. It can be used in all content areas, with any age of learner. It can work with large and small groups, as well as in a one-on-one situation.

The final instructional implication is the need for explicit and direct instruction in all classrooms, with all subject areas. The concept of explicit instruction is not a new one, it is one that often becomes forgotten as children progress through their schooling. As children enter the middle school years instruction tends to shift from the direct and explicit instruction of the early grades, to telling students what to do, or an assign and correct model. Explicit teaching has been shown to be a highly effective instructional technique (Ellis & Larkin, 1998). Explicit teaching makes the hidden obvious and exposes and explains learning that is sometimes taken for granted (Wilkinson, 1999). Ellis and Larkin (1998) provide a very clear definition of explicit teaching. They say that explicit instruction means that the teacher, “ ensures that students are well informed about what is expected, what is being learned, why it is being learned and how it can be used” (p. 586). This definition reinforces that what a student knows should never be assumed. It is our job as teachers to be more explicit in our teaching. Students should not have to guess; they have the right to have the holes or gaps in their learning filled.

Implications for Adolescent Learners

While this research project primarily focused on one student it does have merit when considering the needs of middle school learners. I agree with the International Reading Association (1999) when they say there is a crisis in middle

school education. I never realized just how true this was until I began my research for this paper. There is a definite division between teaching and expectations from elementary to middle school. While grades four, five and six are not that much different from elementary school, the real division comes with the transition to junior high.

As students enter the junior high years there is a significant change in curriculum and expectations. Students are expected to be much more independent and they are faced with a curriculum that mainly addresses content. In my training for the Later Literacy© Project Joyce MacDonald shared a piece of teacher trivia that really opened my eyes to the curriculum shift in junior high. She shared with us that once students are past grade six, the only narrative reading they do is in their language arts classes. The fact is many of these students have not had significant enough exposure to expository text in the middle grades to be successful in junior and senior high school.

Another alert for middle school teachers is that students are still learning to read. They need to acknowledge the fact that reading occurs along a continuum and that they need to be more prepared to address the variety of needs that students in their classrooms will have. This should be true whether the teacher is teaching English or in one of the content areas. The teachers can not assume that students arrive in their classes having all the strategies they need for success in each subject area. The teachers need to become more planful and specific in their teaching of reading-to-learn.

The results from this study indicate that there is promise for students who struggle with literacy in grade four and beyond. The task is to have them identified and then have some type of program or intervention in place. As ideal as a one-on-one program sounds, it is expensive and not readily available to all schools. However, good teaching practice is.

Middle schools need to examine their teaching practices and how they organize for instruction to best meet the needs of all their students. Again, the

International Reading Association's Position Paper on Adolescent Literacy is creating awareness in this area. They advocate that students deserve: a) instruction that helps them develop their literacy skills, b) teachers who are able to provide explicit instruction in literacy learning and across the curriculum, c) reading specialists in the schools to help support the teachers and students (Moore et al., 1999).

There is also more focus on, and a demand for programs to help address this issue. At the 2001 International Reading Association Conference, sessions addressing middle school issues were very well attended. At this conference there were educators presenting successful models that address the needs of these students in a classroom context. So there is hope out there. Educators just have to continue to make it a priority.

Implications for Professional Development

Professional development is one of the ways that teachers are enabled to learn about new practices in reading and literacy education. It is also a way for teachers to reinforce or refresh what they already know about teaching and learning. This project has professional development possibilities at two levels. The first is for what it says about adolescent learners, especially those who struggle with literacy tasks. The second is for the possibilities it shows that are available for intervention with older students.

For teachers who have been trained in this program, or another program, the experience of working one-on-one with students has positive implications for professional development. The impact the training and experience has on the teachers' teaching outside of the one-on-one is a benefit to all students. The knowledge, skills and reinforcement of good teaching a teacher experiences through the one-on-one will have an over riding influence on that teachers daily practice.

The training for program teachers involves three full days of training. The training covers both theoretical and practical aspects of literacy learning. For most participants much of what is learned is already known so it becomes reinforcement.

However, the one thing the training really highlights is the unique needs of middle school students. As a result teachers come away at the end of the day thinking in a new way about their students and literacy practices.

The real change comes with engagement in the process through assessment and the daily involvement with students. Being involved in the theoretical and practical parts of the lesson naturally complements what teachers already know about learning. The specifics that are taught in the one-on-one are areas of interest that could be applied to small group or whole class teaching. The teaching strategies learned are directed at literacy but could easily be applied to content areas. I know from my experience and involvement in the program it has had an impact not only on how I teach, but what I teach and why I teach.

While the program is designed to impact one-on-one, the results will benefit even those children not able to participate in the program. Teachers learn about assessment, about being specific with reinforcement so that every time you listen to students read, you listen and observe them in a new way, with a new ear.

Implications for Research

This research project, I hope, will make a contribution in the area of adolescent literacy, particularly for students with limited literacy skills. In the area of adolescent literacy there is a need for much more literacy specific research. Adolescent literacy would benefit from the same focus that early reading acquisition and intervention has received in the past.

The International Reading Association's Position Paper on Adolescent Literacy (1999) has definitely put the needs of adolescents in the forefront of hot topics. The Position Statement on Adolescent Literacy (1999) acknowledges there is a need for change and research to address the crisis that is occurring within the needs of this population in our schools.

From the research I have done I feel there are some other areas that could be examined in forthcoming research. There is a need for more research to be

conducted with limited literacy students and a need to examine the potential of a program like this with high school students. As mentioned earlier it would be interesting to research the benefits and overflow of professional development outside the one-on-one setting and to develop or modify a program that would work with small groups, thereby making programs more cost effective as they would have the ability to serve more students. As with any intervention, a long term follow up of participants that graduated from the program would also be beneficial.

The scope of this research only looked at the progress of one student. The results with one student have been promising but there is a need for a larger research project that would examine the impact of the program with more students. It would also be beneficial if the research could be focused on students like Rusty, that are identified as having learning disabilities. There is already the initial research from Scarborough with students that are struggling readers. Completing a larger study with limited literacy students would help demonstrate the benefits of intervention to all adolescent students. If students identified with real literacy challenges can make accelerated progress in the 10 weeks, there is positive hope for those with fewer literacy challenges.

Another area of research that would lend beneficial knowledge to the field would be to conduct research on the success of high school students after they participated in the program. Would high school students exhibit the same growth as younger students, or would they show more growth? By demonstrating that there was growth this would give support to the fact that students' literacy and learning skills can be positively impacted at any age. While we know it is optimal to provide intervention and instruction as early as possible, perhaps it is never too late to impact and improve lifelong literacy learning skills.

As mentioned earlier the professional development benefits to the teachers that work in the program is powerful not only within the one-on-one lessons but also extending to general classroom and professional practice. This would be an interesting facet to explore since the overall quality of literacy instruction is an

important factor to literacy learning and teaching. Will teachers be more insightful and teach in a more direct and supportive manner that supports student learning? Will they organize differently? What impact would the experience of the teachers have as an impact on their staff as a whole? Would conversations open up between literacy teachers and core content teachers at a school? Could the processes and strategies from the one-on-one be extended and implemented in content areas? Professional development is an important component to inform us of the answers to such questions.

The final area for possible research or follow up would be to do a long range study of graduates to see whether or not they maintain the gains they made over the ten week period through the year, and two to five years later.

REFLECTION

All in all, this has been a positive experience for me as a student and as a teacher. I have expanded my knowledge and understanding of literacy and teaching in a way I had not anticipated. I had the wonderful experience of being able to work with an enthusiastic young learner to help him improve his literacy skills and to feel better and more confident in himself as a learner. Now when I see him in the halls he stops and shares with me the latest book he is reading. He no longer hides behind the biggest and heaviest books he can find in the library. He can read these books. The last time I spoke with him he was enjoying the latest Harry Potter novel, on his own.

I hope this research project will inspire others to be interested in researching and reflecting on their beliefs and practice with middle school students. I hope this project shows that there is help out there for students beyond grade three who struggle with literacy tasks. These children deserve a chance and now there is a chance for them.

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APPENDIX A: Observational Checklist for Large and Small Groups

What is the atmosphere in the class/group?

What is the pupil-teacher ratio?

How is the timetable organized for instruction?

How is the physical space in the classroom organized?

Are there professionals, paraprofessionals or volunteers in the class? What role do they play?

What supportive clues are visible around the room?

- posters, charts, prompts, art work

What visible literacy clues support individual students?

- on desks, in workbooks

How are children grouped for instruction and group work?

How are tasks modified to meet the needs of different learners?

How are instructions presented to the class?

Is new learning linked to past learning?

Are strategies embedded in instruction?

Are prompts used by the teachers to direct/scaffold student thinking? Help to create more strategic and independent learners.

How are individual students supported in 'problem solving' for learning?

Are a variety of questions asked to stimulate student thinking?

Do students have enough time to process information before answering questions?

How is feedback (praise and encouragement) communicated to students?

During work time how do teachers monitor student progress?

What does communication between home and school look like?

How are parents encouraged to support their child's learning at school?

APPENDIX B: Observations of Rusty Within the Daily Learning Environment

What aspects of the tutoring program are observably reinforced in the class?

Is he reading in class? At home?

Is it an appropriate book choice?

What genre is he reading?

Are strategies being transferred to oral and silent reading in other situations? What strategies are noticed?

READING

- monitoring
- self correcting
- working out words
 - looking through words
 - chunking and sliding together
 - identifying affixes
- metacognition: Can he verbalize why or how he did something?

WRITING & SPELLING

- rehearsing
- rereading and checking
- is daily spelling more strategic
- monitoring
- metacognition

Does he verbalize or share any of his strategies learned with his class? group? At home?

APPENDIX C: Metacomprehension Strategy Index

II. In each set of four, choose the one statement which tells a good thing to do to help you understand a story better *before* you read it.

1. Before I begin reading, it is a good idea to:
 - a) See how many pages are in the story.
 - b) Look up all of the big words in a dictionary.
 - c) Make some guesses about what I think will happen in the story.
 - d) Think about what has happened so far in the story.
2. Before I begin reading, it is a good idea to:
 - a) Look at the picture to see what the story is about.
 - b) Decide how long it will take me to read the story.
 - c) Sound out the words I do not know.
 - d) Check to see if the story is making sense.
3. Before I begin reading, it is a good idea to:
 - a) Ask someone to read the story to me.
 - b) Read the title to see what the story is about.
 - c) Check to see if most of the words have long or short vowels in them.
 - d) Check to see if the pictures are in order and if they make sense.
4. Before I begin reading, it is a good idea to:
 - a) Check to see that no pages are missing.
 - b) Make a list of the words I am not sure about.
 - c) Use the title and pictures to help me make guesses about what will happen in the story.
 - d) Read the last sentence so I will know how the story ends.
5. Before I begin reading, it is a good idea to:
 - a) Decide on why I am going to read the story.
 - b) Use the difficult words to help me make guesses about what will happen in the story.
 - c) Reread some parts to see if I can figure out what is happening if things are not making sense.
 - d) Ask for help with the difficult words.

6. Before I begin reading, it is a good idea to:
- a) Retell all of the main points that have happened so far.
 - b) Ask myself questions that I would like to have answered in the story.
 - c) Think about the meanings of the words that have more than one meaning.
 - d) look through the story to find all of the words with three or more syllables.
7. Before I begin reading, it is a good idea to:
- a) Check to see if I have read this story before.
 - b) Use my questions and guesses as a reason for predicting the story.
 - c) Make sure I can pronounce all of the words before I start.
 - d) Think of a better title for the story.
8. Before I begin reading, it is a good idea to:
- a) Think of what I already know about the things I see in the pictures.
 - b) See how many pages are in the story.
 - c) Choose the best part of the story to read again.
 - d) Read the story aloud to someone.
9. Before I begin reading, it is a good idea to:
- a) Practice reading the story outloud.
 - b) Think of what the people in the story might be like.
 - c) Decide if I have enough time to read the story.
 - d) Retell all of the main points to make sure I can remember the story.
10. Before I begin reading, it is a good idea to:
- a) Check to see if i am understanding the story so far.
 - b) Check to see if the words have more than one meaning.
 - c) Think about where the story might be taking place.
 - d) List all of the important details.
- II. In each set of four, choose the one statement which tells a good thing to do to help you understand the story better *while* you are reading it.
11. While I am reading it is a good idea to:
- a) Read the story very slowly so I do not miss any important parts.
 - b) Read the title to see what the story is about.
 - c) Check to see if the pictures have anything missing.
 - d) Check to see if the story is making sense by seeing if I can tell what

has happened so far.

12. While I am reading it is a good idea to:
 - a) Stop to retell the main points to see if I am understanding what has happened so far.
 - b) Read the story quickly so I can find out what happened.
 - c) Read only the beginning and end of the story to find out what it is about.
 - d) Skip the parts that are too difficult for me.
13. While I am reading it is a good idea to:
 - a) Look all of the big words up in the dictionary.
 - b) Put the book away and find another one if it is not making sense.
 - c) Keep thinking about the title and pictures to help me decide what will happen next.
 - d) Keep track of how many pages I have left to read.
14. While I am reading it is a good idea to:
 - a) Keep track of how long it is taking me to read the story.
 - b) See if I can answer any of the questions I asked before I started reading.
 - c) Read the title to see what the story is going to be about.
 - d) Add the missing details to the pictures.
15. While I am reading it is a good idea to:
 - a) Have someone read the story to me.
 - b) Keep track of how many pages I have read.
 - c) List the story's main characters.
 - d) Check to see if my guesses are right or wrong.
16. While I am reading it is a good idea to:
 - a) Check to see that the characters are real.
 - b) Make a lot of guesses about what is going to happen next.
 - c) Stop looking at the pictures because they might confuse me.
 - d) Read the story to someone else.
17. While I am reading it is a good idea to:
 - a) Try and answer the questions I asked myself.
 - b) Try not to confuse what I already know with what I am reading about.
 - c) Read the story silently.
 - d) Check to see if I am saying the new vocabulary words correctly.
18. While I am reading it is a good idea to:
 - a) Try to see if my guesses are going to be right or wrong.

- b) Reread to be sure I haven't missed any of the words.
 - c) Decide on why I am reading the story.
 - d) List what happened first, second, third, and so on.
19. While I am reading it is a good idea to:
- a) See if I can recognize new vocabulary words.
 - b) Be careful not to skip any parts of the story.
 - c) Check to see how many of the words I already know.
 - d) Keep thinking about what I already know about the things and ideas in the story to help me decide what is going to happen.
20. While I am reading it is a good idea to:
- a) reread some parts or read ahead to see if I can figure out what is happening if things are not making sense.
 - b) Take my time reading so I can be sure I understand what is happening.
 - c) Change the ending so it makes sense.
 - d) Check to see if there are enough pictures to help me make the story ideas clear.

III. In each set of four, choose the one statement which tells a good thing to do to help you understand a story better after you have read it.

21. After I've read a story it's a good idea to:
- a) Count how many pages I read with no mistakes.
 - b) Check to see if there were enough picture to go with the story to make it interesting.
 - c) Check to see if I met my purpose for reading the story.
 - d) Underline the causes and effects.
22. While I am reading it is a good idea to:
- a) Underline the main idea.
 - b) Retell the main points of the story to check and see if I understood it.
 - c) Read the story again to be sure I said all of the words right.
 - d) Practice reading the story aloud.
23. While I am reading it is a good idea to:
- a) Read the title and look over the story to see what it is about.
 - b) Check to see if I skipped any of the vocabulary words.
 - c) Think about what made me make good or bad predictions.
 - d) Make a guess about what will happen next in the story.

24. While I am reading it is a good idea to:
- a) Look up all of the big words in the dictionary.
 - b) Read the best parts aloud.
 - c) Have someone read the story to me.
 - d) Think about how the story was like the things I knew about before I started reading.
25. While I am reading it is a good idea to:
- a) Think about how I would have acted if I were the main character in the story.
 - b) Practice reading the story silently for practice of good reading.
 - c) look over the story title and pictures to see what will happen.
 - d) Make a list of things I understand the most.

APPENDIX D: Later Literacy© Holistic Scale for Oral Reading Fluency

Joyce MacDonald (1995)

1. The reading performance demonstrates minimal grasp of reading strategies and a very limited range of familiar words and language structures. Miscues that seriously affect meaning and structure occur frequently.
2. The reading performance demonstrates some control of reading strategies and a limited range of familiar words and language structures. Signs of uncertainty are registered after specific miscues, and some attempts are made to self-correct and preserve meaning.
3. The reading performance demonstrates an adequate grasp of reading strategies, a moderate range of familiar words and language structures, and control of the meaning cues provided by basic punctuation. Several successful attempts are made to correct miscues that seriously affect meaning.
4. The reading performance demonstrates a competent grasp of reading strategies and a fairly extensive range of familiar words, language structures, and commonly used, figurative language. Many successful attempts are made to correct miscues that do not match context or syntax.
5. The reading performance demonstrates a good grasp of reading strategies, an awareness of most text features and quite an extensive range of familiar words and language structures. Most miscues that seriously disrupt meaning or context are corrected.
6. The reading performance demonstrates use of fluent, flexible problem-solving strategies. An extensive range of familiar words and a variety of language structures, including figurative language are, are readily recognized. Unacceptable miscues that disrupt meaning and syntax are corrected.
7. The reading performance demonstrates the use of highly-skilled, sophisticated reading strategies. Mature vocabulary, stylistic features of text and complex structures are readily recognized. All miscues that affect meaning and syntax are corrected.

APPENDIX E: Later Literacy© Holistic Scale for Oral Retelling

Joyce MacDonald (1995)

1. The retelling demonstrates some unsupported, simple, concrete meaning. Responses may include a major event, a major character, or unconnected details.
2. The retelling demonstrates some simple, concrete meaning. responses a may include major characters, events, or information in random order.
3. The retelling demonstrates supported, concrete meaning. Responses include major characters, events or information organized in a meaningful sequence.
4. The retelling demonstrates supported, concrete and simple, abstract meaning. Responses include essential information both stated and inferred in the text.
5. The retelling demonstrates essential, supported meaning. Responses include both concrete and abstract meaning. Language from text is frequently used to relate plot, characters, events or information.
6. The retelling demonstrates concrete and abstract meaning. Responses include a deeper level of meaning with the inclusion of personal experiences and evaluation of plot, characters, events or information.
7. The retelling demonstrates both concrete and abstract meaning. Responses that extend beyond the literal meaning are thoroughly supported, insightful and may be unique.

APPENDIX F: Later Literacy© Holistic Scale for Writing

Joyce MacDonald (1995)

1. The student's writing reflects the construction of some concrete meaning, expressed in simple or fragmented language. A minimal grasp of the elements of writing and of language conventions is evident.
2. The student's writing reflects the construction of concrete meaning expressed in simple or run-on sentences. Some evidence of basic language conventions is present. many high frequency words are spelled correctly.
3. The student's writing reflects the construction of meaningful text that is organized and sequenced in simple sentences. Basic punctuation is used appropriately. Most words are spelled conventionally; approximations closely match standard spellings.
4. The student's writing reflects the construction of meaning that is organized, logically sequenced, and expressed in a variety of well-formed sentences. The flexible control of basic language conventions is evident.
5. The student's writing reflects the effective construction of meaning that flows smoothly and logically. Vocabulary selection and language structures enhance the writing. Control of a wide range of conventions is apparent.
6. The student's writing reflects the construction of meaning that is clear, unified, and coherent. language structures are complex; vocabulary is rich and precise. Novel ideas are expressed creatively. A mature grasp of conventions is demonstrated.