
Access from the University of Nottingham repository:
http://eprints.nottingham.ac.uk/13229/1/Reflective_Pract.pdf

Copyright and reuse:

The Nottingham ePrints service makes this work by researchers of the University of Nottingham available open access under the following conditions.

This article is made available under the University of Nottingham End User licence and may be reused according to the conditions of the licence. For more details see:
http://eprints.nottingham.ac.uk/end_user_agreement.pdf

For more information, please contact eprints@nottingham.ac.uk
Reflective Practitioners in the 21st Century: A Framework for Ongoing Teacher Professional Development

Dianne Jacquard

In partial fulfillment of an Educational Doctorate in Teacher Education

School of Education

University of Nottingham
# Table of Contents

List of Tables ........................................................................................................... pp. 1-5
List of Figures ........................................................................................................... pp. 6-7
List of Appendices ................................................................................................... p. 8
Acknowledgements .................................................................................................. p. 9
Abstract .................................................................................................................. p. 10
Chapter One ............................................................................................................. pp. 11-19
Chapter Two ............................................................................................................ pp. 20-44
Chapter Three ......................................................................................................... pp. 45-108
Chapter Four .......................................................................................................... pp. 109-185
Chapter Five .......................................................................................................... pp. 186-207
Bibliography ........................................................................................................... pp. 208-225
Appendices ............................................................................................................ pp. 226-362
List of Tables

Table 2.1. Types of data ................................................................. pp. 31-32
Table 2.2. Data Collection Timeline ................................................. pp. 33-34
Table 2.3. Coding of Qualitative Data ................................................ p.35
Table 2.4. Criteria for Judging Research Design ................................. pp. 38-39
Table 3.1. Erica – Self Report .......................................................... p. 52
Table 3.2. Erica – September 2008/June 2009 ...................................... p. 52
Table 3.3. Nora’s Responses ............................................................... p. 54
Table 3.4. Nora – Change ................................................................. p. 54
Table 3.5. Kelton’s Responses ............................................................. p. 56
Table 3.6. Kelton – Change ................................................................. p. 56
Table 3.7. Indications – September 2008 ............................................ p. 57
Table 3.8. Indications – June 2009 ...................................................... p. 57
Table 3.9. Group Work ........................................................................ p. 70
Table 3.10. A Taxonomy of Teacher Engagement .................................... p. 74
Table 3.11. Foundations of Learning .................................................... p. 81
Table 3.12. Four Pillars of Knowledge .................................................. p. 82
Table 3.13. Term 1 – Personal Subject Construct – September 2008 ....... p. 87
Table 3.14. June 2009 – Personal Subject Construct .............................. p. 88
Table 3.15. Follow up Interview .......................................................... p. 90
Table 3.16. Summary – Average Growth ............................................... p. 91
Table 3.17. Change – Writing ............................................................... p. 92
Table 3.18. Change – Self ................................................................. p. 94
Table 3.19. Promoting Learning .......................................................... p. 97
Table 4.1. Learning Framework .......................................................... p. 100
Table 4.2. Analysis of Data ................................................................. pp. 114-115
Table 4.3.  Term 1 – Journal ................................................................. p. 119
Table 4.4.  Journal – First Term ........................................................ p. 119
Table 4.5.  Summary – Term 1 ........................................................... p. 131
Table 4.6.  Term 2 – Learning ............................................................ p. 131
Table 4.7.  Comments – Journal ....................................................... p. 135
Table 4.8.  Comments – Journal – Practice ....................................... p. 135
Table 4.9.  Journal – Comments on Theory ...................................... p. 138
Table 4.10. Journal – Comments on Observations ........................... p. 139
Table 4.11. Term 2 – Summary ......................................................... p. 141
Table 4.12. Term 3 – Plan ................................................................. p. 142
Table 4.13. Term 3 – Journal ............................................................. p. 143
Table 4.14. Development of Theory ................................................ p. 145
Table 4.15. Student Reading Levels ............................................... p. 146
Table 4.16. Term 3 – Summary ........................................................ p. 154
Table 4.17. Comparison ................................................................. pp. 155-157
Table 4.18. Pattern of Processes ...................................................... p. 162
Table 4.19. Literacy Construct ......................................................... p. 166
Table 4.20. Planning – Term 1 ......................................................... p. 169
Table 4.21. Planning – Term 2 ......................................................... p. 170
Table 4.22. Planning – Term 3 ......................................................... p. 171
Table 4.23. Links ............................................................................ p. 175
Table 4.24. Coding – B ................................................................. pp. 180-181
Table 5.1.  Summary – Process ......................................................... p. 189
Table 5.2.  Summary ................................................................. p. 190
Table 5.3.  Summary Content ......................................................... p. 191
Table 5.4.  Comparison – First ......................................................... p. 192
Table 5.5.  *Comparison – Third* .................................................................p. 194

Table 5.6.  *Future Research* .................................................................p. 203
List of Figures

Figure 2.1. The Quintain ................................................................. p. 29
Figure 3.1. Erica’s Learning .......................................................... p. 51
Figure 3.2. Nora’s Responses ......................................................... p. 53
Figure 3.3. Kelton’s Learning .......................................................... p. 54
Figure 3.4. Engaging the Brain ....................................................... p. 66
Figure 3.5. Reading Recovery Teacher Learning .............................. p. 68
Figure 3.6. Teacher Personal Subject Construct – A ...................... p. 85
Figure 3.7. Personal Subject Construct – B ....................................... p. 100
Figure 3.8. Personal Subject Construct – C ...................................... p. 106
Figure 4.1. Running Record ........................................................... p. 116
Figure 4.2. Analyzing Student Data ................................................ p. 121
Figure 4.3. Using Technology ....................................................... p. 122
Figure 4.4. High Expectations ....................................................... p. 124
Figure 4.5. Partnership ................................................................. p. 125
Figure 4.6. Collaboration .............................................................. p. 127
Figure 4.7. Leadership ................................................................. p. 127
Figure 4.8. Planning ................................................................. p. 128
Figure 4.9. Running Record – Carry Over ....................................... p. 129
Figure 4.10. Running Record – First ................................................. p. 130
Figure 4.11. Running Record – Entry/Exit ........................................ p. 136
Figure 4.12. Running Record – Entry/Exit ........................................ p. 146
Figure 4.13. Analysis of Data ....................................................... p. 148
Figure 4.14. Technology ............................................................... p. 148
Figure 4.15. Partnership .............................................................. p. 150
Figure 4.16. Opinion ................................................................. p. 153
Figure 4.17. Overview of Reading Recovery Implementation ...................p. 159
Figure 4.18. Four Step Process .................................................................p. 176
Figure 4.19. Framework .................................................................p. 184
Figure 5.1. Generic Framework ..........................................................p. 205
Appendices

Appendix A  Canadian Norms for the Observation Survey – June 2008........p. 226
Appendix B  June Self Analysis.................................................................p. 228
Appendix C  Self-Assessment Tool ............................................................p. 230
Appendix D  Self-Evaluation – Answers ......................................................p. 233
Appendix E  Year End Evaluation...............................................................p. 241
Appendix F  Innovation Configuration Map ................................................p. 245
Appendix G  Analysis of Case Study ..........................................................p. 266
Appendix H  Conversations after sessions ...................................................p. 281
Appendix I  Journal Document .................................................................p. 299
Appendix J  Analysis of Student Data ........................................................p. 312
Appendix K  Follow up Interview ...............................................................p. 328
Appendix L  Lesson Analysis Conversations ..............................................p. 329
Appendix M  Marzano’s New Taxonomy ....................................................p. 335
Appendix N  Bloom’s Taxonomy of Learning Domains ..............................p. 342
Appendix O  NSDC’s Standards & Reading Recovery ..............................p. 351
Appendix P  Teacher Lesson Records .......................................................p. 359
Appendix Q  Response to Criticism ...........................................................p. 361
Acknowledgements

First and foremost I must thank my editing team who donated their time and expertise to help me put this paper together. Kathy Stockman, a dedicated educator, who told me that I would finish this project even if she had to sit with me and hold my hand. Dr. Stillman Jacquard, who having just completed a PhD, kept me on the right track by asking hard questions that made me think outside the box. Mr. Bill Curry, who made sure that I, in no way tarnished the name of the Tri-County Regional School Board, and Ms Dianne Stuart, as President of the Canadian Institute of Reading Recovery ® insured that I did not break copyright in using the Reading Recovery name.

Cindy Hiseler, you read this research to edit it because of your experience working with Reading Recovery and as a published author. I would also like to acknowledge Mr. Phil Landry, Superintendent of Schools, for allowing me the time away from my full-time occupation to complete this project. Dr. Colin Harrison, University of Nottingham, who prodded me to complete this project and to work at attending conferences as a participant and also as a facilitator of information sessions related to my research. Thanks for all the suggestions when it came time to write. I would like to acknowledge my family. They listened to me voice my numerous opinions, some good and some bad, regarding this piece of work. They stuck with me until the end, but I know that it was not easy. Mary Meuse, my sister, questioned and edited with a critical eye all the spelling and punctuation of this document. Thanks for the time! The Reading Recovery group made this work easy. They were willing to try anything as long as they were learning. I have changed their names to protect their privacy, but they were the foundation of this piece of work. I learned as much from them as they did from our time together. Thank you! To anyone I have forgotten to mention, it was not intentional. There were so many supportive voices during this journey that it would be impossible to mention everyone. I appreciated everyone’s interest and support.
Abstract

As a Reading Recovery Teacher Leader, it was possible to study a group of teachers learning to teach Reading Recovery. It was observed that not only did the teachers’ eyes open to the possibilities of student learning, but also to their own learning. With this in mind, the focus of this study is to follow a group of three teachers who are transforming their learning during the 2008-2009 academic year. Parallel to their learning, a new theory of offering professional development will be explored, that could be employed beyond the confines of Reading Recovery.

The methodology employed facilitates the generation of a new theory surrounding professional development. The alternative theory of professional development is offered as an attempt to imitate the success of teachers learning through Reading Recovery professional development.
Chapter One

The Tides of Change in Education

If we, as planners of teacher professional development, are looking to make change in teachers’ educational practices, we must first look to ourselves and how we understand the process of change in the field of education. We must also remain true to ourselves in realizing what is possible and what is not possible in offering continued professional development. Within any educational system, change must be reframed (Reeves, 2009) from a personal attack, to a new meaningful opportunity, with space and time for teachers to gain trust in the process and in the facilitator. Trust, when discussing change at the grassroots level is difficult. Fundamentally, the change needed is concerned with altering the tides of teachers viewing themselves as technicians rather than reflective professionals (Adams & Tulasiewiz, 1995). Reflective practitioners are described as effective teachers whose understandings come through the consistent practice of reflective thinking. There has been a big push to re-professionalize teaching more in line with the needs of 21st Century society (Furlong, 1996). Wagner (2010) classifies these needs as a curriculum of processes. Research indicates that a curriculum of processes may be referred to as habits of mind (Costa and Kallick, 2009). The sixteen habits of mind listed in Costa’s and Kallick’s work promotes a practice of engaging with complex problems, dilemmas, and conflicts whose resolutions are not immediately apparent in school, in the workplace, and in life. If there is a belief (Schmitt, Askew, Fountas, Lyons & Pinnell, 2005) that any improvement in student achievement requires improvements in teacher performance, then it is time to act within that professional culture. This is needed to bring about change to present perceptions regarding on-going teacher professional development.

Historically, teachers were seen to base their practice on a body of technical or specialized knowledge that was beyond the reach of the layperson. Better education systems and information technology opened up a field of infinite possibilities for learning in the 21st
Century (Furlong et al, 1996). This has ultimately forced a change in how we view education in the 21st Century. Informed and skilled teachers are essential and will not be available without high quality, intensive and continuous professional development (Schmitt et al, 2005). Teachers now need to develop a body of knowledge-based skills that include the arts and technology and to possess literacy and numeracy knowledge. Included in that mix they must have health, fitness and qualities of endurance that promote mental, as well as physical health. Since the Second World War, teacher education has been under constant scrutiny (Wideen & Grimmet al. (Eds.), 1995). Teachers are required to undergo longer periods of education, significant parts of which need to go on within an educational setting.

Change in teaching practice must be reframed (Reeves, 2009) from a personal attack on teachers to a new, meaningful opportunity, with space and time for teachers and educational partners to gain trust in the process. Fullan (1993) postulates that teachers should be the roots of any change initiative. This should bring planners of professional development to ask themselves how to plan a learning activity that would be successful in changing teacher attitudes, knowledge, and ultimately their practice alignment so it is more in tune with today’s needs. If professional development is the key to student success (Schmitt et al., 2005), then attention to teacher learning is obligatory in today’s climate of change. Over the last years, working with teachers sparked an interest to better understand how successful professional development was planned and carried out to make a positive change in teachers’ learning and practice. As a Reading Recovery Teacher Leader it was possible to study groups of teachers, year after year, in the process of learning to become Reading Recovery teachers. It was observed that not only did the teachers eyes open to the possibilities of student learning, but also to their own learning. With this in mind, the focus of this study is to follow a group of teachers learning to teach Reading Recovery and be part of the transformation of their learning. Reading Recovery is an early intervention that targets Grade 1 students who have been identified as experiencing reading and writing difficulties (Clay,
The professional development is offered to teachers during an academic year of continuous and sustained study. Pinnell (1991) advocates that this interactive staff development model is an example of applied learning to both children and teachers. It is based on the learner constructing their own knowledge (Askew, 2009), through the use of their own language, where experiences are presented for refinement and extension by others (Pinnell, 1991). Herman and Stringfield (1997) touted the Reading Recovery professional development as an exemplar for effective teacher professional development. Through a process of planned, sustained professional development (Clay, 2005), Reading Recovery professionals were observed to take on learning and incorporate that learning in their practice. Along with this change, it was continuously observed that some teachers demonstrated leadership at their schools or within the system after this period of professional development. Observing that change in teacher behavior, as the Reading Recovery Teacher Leader, was the impetus that led to an interest in describing how and what teachers learned over that year. To fully understand that process, the teachers learning during the Reading Recovery professional development would have to be studied. This meant that teachers would have to be followed while involved in the specific process of learning to teach Reading Recovery (Clay, 2005). It was hoped that the journey of following the teachers would help to solidify the abstract concept of learning, into a concrete process of professional development that could be employed beyond the confines of Reading Recovery. This proposed model of professional development would hopefully facilitate the beginning of a journey for teachers becoming reflective practitioners in their own field of study. Reading Recovery learning is very well planned (Pinnell, 1991) through a three-tiered process, but the professional development was meant for the Reading Recovery intervention. This researcher had no notion of improving or changing the process of Reading Recovery professional development. It was decided early on that:
1. Learning by teachers within the process of professional development would be the focus.

2. The process of offering Reading Recovery professional development at the district level would not be altered. Teachers were studying to become Reading Recovery teachers and it was important to protect their interests as well as the systems interest in offering Reading Recovery as an early intervention. Reading Recovery is protected by its trademark, and if altered it would not be considered Reading Recovery. Therefore, any extra work would be accomplished outside the confines of Reading Recovery.

3. For this study, the analysis of data obtained from teachers would be collated, analyzed and explained in two ways. The first set of data collected is the materials used as part of Reading Recovery professional development and they would remain the same. The second set of information is the additions added to broaden the data set and have information beyond the reach of Reading Recovery. This information was not considered part of Reading Recovery professional development, but was in addition to the required Reading Recovery materials. Personally, this was a time of great speculation about offering quality professional development to teachers. On two fronts, it was also a time of great excitement epistemologically. It would inform practice while also hopefully adding to a bank of knowledge reached by a larger audience. The starting point for this investigation would have to be tri-fold. The necessity existed to thoroughly explore and lay bare the learning taking place during the Reading Recovery professional development. This would involve observing and reporting on the learning process in action in a Canadian setting. Secondly, developing an opinion based on the varied theoretical underpinnings would be necessary. This would aid in describing the change or transformation in teacher learning. In the end, it would be important to formulate a new theory to use the
knowledge gained in a Reading Recovery milieu in a constructive manner beyond the confines of Reading Recovery.

Summarized, the planning for this project would consist of following teachers as they learned to teach Reading Recovery. The information gathered would be used to investigate the learning taking place during a process of professional development. The hope is that it will show how the changes in teacher attitudes and knowledge augmented or transformed over the year. If any conclusions may be drawn, they would be used to further the knowledge on how to plan and present quality professional development in other areas of professional needs as determined by practice.

Teachers are working in complex and unpredictable situations and must make minute-by-minute judgments, which are in the best interests of their students (Feiman-Nemser, 2009). Today’s teachers must be encouraged to be highly skilled individuals who develop a body of knowledge, foster autonomy, and take responsibility for teaching students in everyday situations. The teaching profession has become or is fast becoming a profession that demands highly motivated, skilled individuals who are ready to meet the demands of present day society (Zhao, 2009). They have great personal and professional responsibility to share in the education of a generation of individuals ready to meet new challenges.

Education as a professional body has been coming under constant criticism because of the needs of present day society for a relevant knowledge base (Darling-Hammond & MacLaughlin, 1995). The profession is constantly criticized because the nature of professional knowledge is under constant debate and change. Autonomy in the field is questioned as nothing more than protection of interests and avoiding accountability. The discussion about responsibility in education is seen as nothing more than maintaining the status quo for the convenience of the professional (Furlong, Barton, Miles, et al. 2000). This is harsh criticism, in a field of study that is constantly debating the value and necessity of knowledge, which
may be considered vital to the evolution of an educated population ready to take on the world.

Some see the education field as not responding to the demands and needs of the students within present day society (Zhao, 2009). This is where we, as agents of change in the field, can attempt to understand the process and the work that is needed to make the change happen. There is a necessity for teachers to remain current with their understandings. This can be a difficult journey because of the constantly changing debate over what knowledge is needed and valued to make this change. This study represents an investigation into how to plan, execute and evaluate professional development for teacher learning. Initially, if there is a determination of teacher learning, it is important to understand how a phenomenon such as professional development fosters that learning. No miracle or perfect solution is sought. A shift in beliefs and a better personal understanding about the planning of professional development for teachers is determined to be necessary for this investigator. Professional development, at its foundation, must empower teachers to view learning as positive and necessary for the continuation of an effective teaching profession (Continued Professional Development (CPD),2009, April 17). The goal of continued learning is to empower teachers to become lifelong learners (Office of Lifelong Learning (OLL), 2009) while not being overwhelmed by the stress of constant change. Teachers must be valued and helped to remain current in practice so that they still embrace a career as a teacher.

Over 10 years ago an opportunity presented itself to study Reading Recovery (Reading Recovery Council of North America (RRCNA, 2009, May 18) theory and practice. This year of study solidified the notion that professional development must be ongoing, supported and valued as an important part of an educational system. The learning was constantly applied and revised within one’s own teaching practice. Critical reflection was an integral part of the professional development and it was fostered through written assignments, after lesson discussions, after teacher visits, and constant debate about how to improve one’s
own practice. An important part of the professional development was the time that was set-aside for teachers to discuss teaching and practice. Since then, this investigator’s employment has been to facilitate teacher professional development through Reading Recovery, so that teachers break a cycle of literacy failure for children who are beginning their educational journey. Over time, Reading Recovery professionals seemed to change their view of what it meant to be literate and how to teach children to read and write. Also, it was interesting to observe that change happening over the first year of study. Simply stated, the research interest of this study involves studying the learning during Reading Recovery professional development to:

1. Investigate the learning process in action and the impact on teachers’ practice. How do teachers learn?

2. To develop an opinion through analysis of theoretical underpinnings that describes the changes in learning over time. Is there a transformative process in learning? This interpretation would be based solely on observations, events and conversations and linked to present educational theories.

3. To create a generic professional development model that is based on the evolving theory throughout the research process that could be migrated to teaching beyond Reading Recovery. Is it possible to create a generic framework for professional development from the lessons learned? In the end, this researcher will have learned more about teacher learning through planning and presenting professional development to adults.

With the goals of this study in mind, the second chapter will be a presentation of a methodological framework. This frames the project and will drive forward the validity and reliability of the body of work within the study. The third and fourth chapters will examine teacher learning based on the theoretical foundations of how they learned, and where this knowledge might lead a professional educator in offering quality professional development.
Data will be collected that includes conversations, observations and events that lay bare teacher’s opinions on knowledge gleaned from theory, practice and the self determination of their educational needs. The qualitative data collected during the 2008-2009 academic year will be coded using a matrix, triangulated, and compiled while the data that is quantified will be organized and reported according to simple statistical procedures. The fifth chapter includes the summary, discussion and conclusions. The discussion and conclusion will revolve around the planning of future professional development from the analysis of the research. The planning of future professional development will rest on the changing attitudes of teachers about learning, and change in actual practice of teaching children over the period of their year in professional development.

In times of changing societal values, attitudes and employment opportunities, it is time to examine our own beliefs and practices toward educational norms. Our beliefs are based on our background knowledge, so it is also important to examine and then study current theory and practices to update our own constructs of learning in the 21st Century. Fullan (1993) argues that teachers should be the roots for all change within a system. As a teacher who works with other teachers, it is important and appropriate that this educator investigate how a change in personal knowledge and practice might ultimately better meet the needs of teachers in the 21st Century. Knowles, Holton and Swanson (1998) eloquently stated that to understand how others learn, we must first understand how we learn. Subsequently, as a teacher of children and adults, adding the title of researcher could potentially complicate the dynamics of the group to be studied. These include ethical and reliability concerns throughout the process. Planning a solid foundation for this study is of paramount importance to help counter these claims and will help quash any limitations of this study. One might argue that it will be difficult to fairly report on the evidence because of the differing roles of the examiner. It could result in bias and an appearance of lack of rigor in the analysis and reporting of findings. Therefore, the second chapter is the theoretical
foundation that grounds the research in acceptable methodology and it will attest to the reliability of this research. Aptly, this chapter is titled “Plotting the Course”.
Chapter Two

Plotting the Course

Reading Recovery: Teaching Children to Read and Write

The goal of Reading Recovery is to dramatically reduce the number of first-grade students who have extreme difficulty learning to read and write and to reduce the cost of these learners to educational systems (Clay, 1990). Reading Recovery is a short-term intervention of one-to-one tutoring for low-achieving first graders. Reading Recovery serves the lowest-achieving first graders which are classified as the students who are not catching on to the complex set of concepts that make reading and writing possible. As mandated by the Canadian Institute of Reading Recovery (2006) the group of three (3) teachers participating in this study first selected a carry-over student, if there was a need. This means that the student did not complete their series of lessons the previous year and they will finish their series of lessons during the current year. Second, the teachers chose a student if they had transferred from another school and they have not finished their series of lessons. Third, the teacher administered An Observations Survey of Early Literacy Achievement (Clay, 2006) to any six year old student not considered to be making good progress or is new to the school. This survey of behaviour includes:

- An identification of the letters of the alphabet task,
- A concept about print task,
- A word reading task,
- A writing vocabulary task, and
- A hearing and recording sounds task.

As part of the Observation Survey a running record is administered that helps to detail the reading behaviours exhibited by the student. Individual students receive a half-hour lesson each school day for 12 to 20 weeks with a specially trained or training Reading Recovery
teacher. Daily 30-minute Reading Recovery lessons are individually designed and individually delivered by specially trained teachers. Using a wide range of procedures, teachers make moment-by-moment decisions within each lesson to support the individual child. In Reading Recovery, careful observation of reading and writing behaviors guides teaching decisions. As teachers gather data, they align their teaching with what a child actually does. Reading Recovery teachers are trained to use Clay's *An Observation Survey of Early Literacy Achievement* (Clay, 2006) to assess each child's strengths and confusions. The first 10 sessions of lessons provide further opportunities for assessment as the child engages in reading and writing. These 10 sessions are known as an opportunity to roam around what is known by the student. A record or log of observations is kept and lessons are planned accordingly.

After the 10 roaming around the known lessons are complete, Reading Recovery lessons begin. The teacher takes a running record of the child's progress on text reading every day and uses the data to plan future reading lessons. Writing is also a component of the lesson. The lesson record document is of utmost importance to the teacher. This record informs the teacher of the minor or major changes to the child’s behaviour towards literacy. This record includes:

- Notes on familiar reading. The student has seen this text before and it should be an easily read text.
- Notes of the reading behaviors from the running record.
- Notes on the strategic activity on text used by the student. It should also be noted if it is prompted or observed.
- Notes on any letter work done by the student.
- Notes on writing that include the message composed and how the child constructed words and learned new words.
- Notes on the use of space, concepts, sequence and phrasing in reading and writing.
Each lesson consists of reading familiar books, reading yesterday’s new book and taking a running record, working with letters and/or words using magnetic letters, writing a story, assembling a cut-up story, and reading a new book (Clay, 2005). The teacher creates opportunities for the child to problem solve and provides just enough support to help the child develop strategic behaviors to use on texts in both reading and writing.

A series of Reading Recovery lessons has two positive outcomes:

1. The child meets grade-level expectations and can make progress with classroom instruction, no longer needing extra help. Once it is observed and noted that the child has made significant progress, the student is again administered *An Observation Survey of Early Literacy Behaviors* (Clay 2006) by an unbiased teacher. This helps to guarantee the validity of the results. The student will discontinue their series of lessons.

2. The child makes significant progress but does not reach grade-level expectations. Additional evaluation is recommended and further action is initiated to help the child continue making progress (Clay, 2005).

**Professional Development**

Professional development is an essential part of Reading Recovery, utilizing a three-tiered approach that includes teachers, teacher leaders, and university trainers. Professional development for all Reading Recovery professionals begins with an academic year of graduate-level study and continues in subsequent years. At the District level, with the support of the teacher leader, Reading Recovery teachers develop observational skills and a repertoire of intervention procedures tailored to meet the individual needs of at-risk students. The comprehensive staff development model ensures the quality of teaching and implementation in schools and systems. Integral to Reading Recovery professional development is the use of a one-way glass, with class members observing lessons and talking about a child’s behaviors and a teacher’s teaching decisions. At two week intervals the
teachers within this study took part in this staff development. This teacher lesson format consists of three sections:

1. The Introduction – This section lasts approximately 10 minutes and includes a lead into the session by choosing a focus and then moving quickly into the introduction of the children.

2. Teaching – This section lasts approximately 65 minutes and includes an acknowledgement of the teacher’s efforts. Two teaching sessions follow, one after another. There are always two teaching sessions, which might include a video lesson if the PD group is small.

3. The Discussion – This section lasts approximately 50 minutes and includes a specific discussion of the lessons with each teacher, a general discussion about reading and writing and concluding with a discussion of implementation issues.

Ongoing professional development is at the heart of Reading Recovery’s success. This continued learning keeps professionals up-to-date on recent changes in Reading Recovery and ensures that professionals at all levels deepen their knowledge about implementation and teaching. The Canadian Institute of Reading Recovery Standards and Guidelines (CIRR, 2006) provide detailed information about professional development at all levels of Reading Recovery. Ongoing professional development, coupled with strict adherence to standards, assures the quality of Reading Recovery.

**Reading Recovery Research**

Reading Recovery is a widely researched intervention for young children having extreme difficulty with early literacy learning. Reading Recovery has been examined by high-quality experimental and quasi-experimental studies, and by qualitative studies on various aspects. Reading Recovery's strong experimental research received high effectiveness ratings in all four domains from USDE's What Works Clearinghouse (RRCNA, 2009, May18). After 30 years of research, more than 100 references to Reading Recovery
appear in The Education Abstracts Index and Academic Search Premiere Index. Studies described in this section are grouped according to frequently asked questions (RRCNA, 2009, May 18). These questions are:

- Is Reading Recovery effective?
- What is the evidence for children's continued progress after Reading Recovery?
- Does Reading Recovery influence student's self-esteem?
- What do research reviews say about Reading Recovery?
- Is Reading Recovery cost effective?
- Does Reading Recovery meet the criteria for scientifically based reading research?

**Background on Reading Recovery Criticism**

Reading Recovery is a scientifically based early literacy intervention used in North America since 1984 (RRCNA, 2009, May 18). Reading Recovery has drawn criticism from a small but vocal minority who hold differing views about the beginning reading process. Although critics often quote research, advocates can be confident that the vast majority of research evidence supports Reading Recovery. The critic’s work has been rebutted by experts in the field of early literacy learning (see Appendix Q) and they are briefly discussed in Chapter 3.

**Methodological Framework**

To understand the scope of this study, it is important to have a clear rationale of the guiding principles that will move forward the telling of this story. The story to be told, in this case, is the phenomenon of the learning taking place during a period of Reading Recovery professional development. This story is told in the first person narrative as the researcher/Teacher Leader is part of the group and trying to teach, learn and conduct research at the same time. To begin, it is necessary to set the stage with a methodological framework that will help to validate the study by having reliable results. This may only be done if the rationale behind the framework is sound and supports the collection and analysis of the acceptable knowledge in a discipline.
Cochrane (1981), when he wrote about having a clear concept of teaching, stated that not all learning requires teaching. Trying to bring about learning entails much more than telling, and the most important measure of successful teaching is the quality and quantity of student’s learning. This study is interested in examining the quality and quantity of learning by a group of teachers in the field of education. The teachers became the students during the academic year of 2008-2009. Examining epistemological considerations, there must be rationale behind what knowledge could be generated by conducting a study with this group of teachers. When looking to the prevalent outlooks on what is considered epistemologically viable to the field of social sciences, one cannot ignore the prevalent schools of thought on what is considered knowledge. Bryman and Teevan (2005) discuss three main thoughts on how to view a study within society that will yield acceptable knowledge in a discipline. Notably, the first position is positivism and that supports the application of natural science methods (Ledoux, 2002). This method seeks to elucidate the rules that govern the natural world by applying an empirical and scientific method to the study of a problem. The term natural science is used to distinguish it from the social sciences, which apply the scientific method to study human behavior and social patterns while in their social reality. Another train of thought is the whole notion of empirical and critical realism. The overall belief of this position is that natural and social sciences can and should use the same approach to the collection of data. In this way, reality may be understood by describing, accounting for and understanding the relationship between objects. The third notion is to interpret actions and the social world from the participants in the studies point of view. The focus is to grasp the social reality and interpret it in terms of concepts, theories and the literature of a discipline. This has been described as interpretive or phenomenology.

If we are to discuss the interpretivism of social reality within social research, then we must also factor in the ontological view within this study. Ontology is described as (Merriam, 2009) a state of being while being involved with social entities where there is a
reality external to themselves. This could result in the temporary build up of social constructions from the perceptions and actions of others. The objectivism school of thought implies that a phenomenon confronts the individual and exerts pressure to conform. The constructionist, on the other hand, states that the participant is an active player in the social construction of their own reality.

This study will purport that the epistemological phenomenology of grasping social reality will ground the work. At its underpinning, it will fundamentally be positioned in a common sense interpretation based on current theoretical postulations of those studied. It will add to the foundation of knowledge surrounding teacher learning within the field of education by showing their journey to add to their background knowledge. Specifically stated, this would be the learning through a process of sustained professional development. Ontologically, the group will construct its reality by acting upon their truth, and conversely by being acted upon within their group and educational environment. To be more specific, it might be concluded that the professional development group can’t be taken out of their overall sociological construct. The teachers are acted upon and they act upon the reality within a school board as well as within their own professional development group. They also impact a larger context of students and society by their teaching. Conversely, they are also being acted upon by their participation within a learning process undertaken through professional development.

**Design of Research**

As with any investigation, it is necessary to have a problem to solve. As so often exists, there is no simple solution to solving an existing problem. When that problem exists within an established institution such as a school system, there are many proponents of a quick fix or finding a simple solution to a complex issue. Clay (2005), in her multitude of publications, often alludes to tying ourselves to a simple theory, when in reality it is tremendously complex. In this way, this study tries to simplify and lay bare a process that is
stunningly complex. Simply stated, that process is teaching teachers to teach. The language chosen to describe the problem(s) for this study is an attempt to simplify the description of the concept to be studied, but not the content to be reported. The overlying problem is gaining an understanding of:

- A process of teacher learning that leads to better practice, better knowledge about theory, and to watch teachers develop a greater understanding of their own professional needs.

As with any problem, when a solution is sought, it normally leads to the formation of other areas of interest. These areas of interest stem from the initial problem and may be considered a sub-set of the original problem.

- Over a period of time, develop an opinion through analysis of theoretical underpinnings to describe the changes in learning.

- As the learning evolves, formulate an opinion regarding the process of professional development that facilitated the learning and develop a personal construct to be used beyond Reading Recovery.

The specifics of the problem to be studied and the ontological focus will lead to the constructing of a theory while studying the phenomenon. Bryman and Teevan (2005) describe this type of study as revolving around a particular focus or case. More specifically, they describe this type of study as an empirical case study and it is used to investigate a contemporary phenomenon within a real life context. In this circumstance, an exploratory case study will be conducted that will be grounded in theory. The deployment of this method will lead to the expansion of a theory based on the data collected. The analysis of data is then grounded in present day theory and it will ultimately lead to the generation of a new theory about the process of learning through participation in professional development.

A single case will be studied. This case study is comprised of three (3) teachers who are part of a group of five (5) teachers studying to teach Reading Recovery. Two (2) teachers
opted out of the study as they felt that it would add to their workload. They are participating in the year of initial professional development (Canadian Institute of Reading Recovery (CIRR), 2006) with a few exemptions. One of the standards (CIRR, 2006) requires that all teachers teach four children daily, but this was not possible because of the Grade 1 population at each school. All teachers participating in this study taught two students daily. A written exemption was requested and granted (CIRR, 2006) because of the nature of the School Districts geographical configuration and school populations. The rationale (Stake, 2006) categorizing this study as a single case study design may be described as:

- It leads to a better understanding of certain parts of the phenomenon.
- The particular collection of information determines the case.
- The parts make up the information or share a common character or condition.
- The common characters or conditions are categorically bound together.
- The parts studied will help to tell more about the phenomenon.

This is more correctly described as the Quintain (Stake, 2006), where a target is studied by examining parts of the phenomenon. On this occasion, the problem will be investigated by the collection of evidence from the three participants. Then, with the present theory grounded in the data collected, there is room to postulate a new theory or theories on how and what they learned through professional development. Figure 2.1. – The Quintain, represents Stake’s (2006) description of the Quintain.
The basic outline of the research is now evident, but there is also a need, when conducting social research (Bryman & Teevan, 2005) and especially case studies (Stake, 1995) to lay out a specific protocol. It is understood that by laying out a protocol, it is a way of increasing the reliability of a case study. Reliability refers to the extent to which research findings can be replicated (Merriam, 2009). Its very specific use is intended to guide the investigator in carrying out the collection of data from the three (3) participants in the Quintain of this single case study.

The Case Study Protocol

Introduction

This is an overview of the whole project. Its intent is to focus the study and give the researcher a clear path to the collection and analysis of data, and then the researcher must be able to draw conclusions based on the findings. As previously stated, the problem is to gain an understanding of:

- A process of teacher learning that leads to better practice, better knowledge about theory, and to watch teachers develop a greater understanding of their own professional needs.
As with any problem, when a solution is sought, it normally leads to the formation of other areas of interest. These areas of interest stem from the initial problem and may be considered a sub-set of the original problem.

- Over a period of time, develop an opinion through analysis of theoretical underpinnings to describe the changes in learning over time.

- As the learning evolves, formulate an opinion regarding the process of professional development that facilitated the learning.

Progressing beyond this point without a theoretical framework to further guide this researcher is pointless. The theoretical framework that follows is based on the works of Stake (1995, 2006), Merriam (2009), Bryman, Teevan (2005), and Yin (2009). They are researchers that focus on social research, and especially on building and reporting on good case study work.

**The Research Design**

**The Study**

This study will be a single case study. As described by the Quintain (Stake, 1995) where three (3) participants take part in the Initial Reading Recovery professional development. Once the requirements of the training are fulfilled (CIRR, Standards and Guidelines, 2006), they will be certified as Reading Recovery teachers. The period of professional development is one academic year of planned and sustained learning and is classified as a longitudinal study. The Reading Recovery professional development undertaken will be aptly discussed in Chapter 3. The decision to classify this study as longitudinal, stems from the duration of the professional development and the extent of the time spent in meetings. This study takes place during the 2008-2009 academic year, which makes it a 10 month long study. It is meant to offer an exploration through the collection of data, which will show a change over time in teachers learning, as well as pertinent literature on teacher learning, professional development, practice and knowledge about their
professional self. The exploration is expected to lead to the development of a theory in regards to offering good professional development beyond Reading Recovery. At this point, the data to be collected and analyzed will be considered mixed. This study will include both qualitative and quantitative data that will help develop a new theory on professional development. The grounded theorists postulate that the analysis of the data is based on the notion that the ever developing theory will lead and drive forward the investigation. One might look on it as building a story, using your own and others work, to create a new piece of work, or an elaborated story. A more elaborated definition of grounded theory will be forthcoming in the next section of the protocol.

**Principles of Data Collection**

There are two types of data that will be collected for this study. As the Reading Recovery initial professional development modus operandi requires following a certain set of standards and guidelines (CIRR, Standards and Guidelines, 2006) that is where the data collection must begin. The Reading Recovery Teacher Leader has a responsibility and obligation to fulfill the mandate set out by the school district and also by the Canadian Institute of Reading Recovery to deliver a prescribed model of professional development. This did not change because I was the Teacher Leader and the researcher. The second set of data is the information that is to be collected above and beyond the confines of offering Reading Recovery professional development. These two sets of data are listed in Table 2.1 – *Types of Data*, along with the tools that will be necessary to collect the data during this longitudinal exploratory study. A brief rationale is included as to why this data is important to the study.

**Table 2.1.**

*Types of Data*
| **Conversations** – After group teaching sessions, during group sessions, after and during individual sessions, | Digital voice recorder | This was a starting point. Since conversations were a large part of the learning process it was important to document. | Conversations – Interview – post study | Digital recorder | I wanted to gage where the teachers felt they were now in their learning and how the PD had helped them in understanding reading and writing theory in their own practice. We normally did not do this in Reading Recovery. |
| **Events** – Videos Teaching Sessions Teaching children | Video camera Session notes Lesson Records Predictions of Progress Observation Survey Summary Multiple Assessment Summary | This data was all supplied by the regular sessions or Reading Recovery PD. It was collected and used as the data for the study. | Events- No new events were planned |  | As I had to some how collect data, I felt that it was necessary to video tape some of the sessions. Some were not video taped because I was innodated with information and forgot. |
| **Products** – Running Records – assessment for learning Reading progress – record of acceleration Writing progress- development of writing skill Teacher notes | Compilation of Running Record information about learning Reading Levels Graph shows change over time Writing Vocabulary | These products were used in Reading Recovery PD. | Products- Initial and Final questionnaire Case Study Learning journal | Questionnaire Collection of case study information Paper or electronic journal access | I felt that I did not know the teachers well enough and that I needed a little more information about their background knowledge about literacy and how that knowledge |
Timeline of the Study

As this is a study that is taking place over a relatively long period of time, it is imperative that there be a timeline set for the collection of the data. This timeline is divided into the months of an academic school year and a matrix is created to organize and allow for the continuous analysis of revolving theory involved in a grounded theory approach.

Table 2.2.

Data Collection Timeline and Coding Record

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conversations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After group teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conversations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after and during</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>individual sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conversations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Events</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher analysis of own</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>video</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Analysis of Data**

A mixed method of data collection will be undertaken. A Glaserian outlook (The Grounded Theory Institute (TGTI), 2010, April 16) of viewing all records of learning as data is employed. Qualitative and Quantitative data will be collected and analyzed along the lines of a grounded theory approach. The Grounded Theory approach is where the analysis of data is done almost in a reverse fashion from traditional research. It is a continuous approach, where there is a constant collection and analysis of data. This method is classified as conceptualizing the abstraction of the passing of time (TGTI, 2010, April 16). On this occasion the researcher is tasked with both inductive and deductive thinking to make a sensitive analysis of evidence that is produced by teachers in a learning situation. The collection of qualitative data (Stake, 2006) will be coded, grouped into similar concepts; then categorized. The Grounded Theory Institute (2010, April 16) advocates that this is the basis for the creation of a new theory. They also list stages of evolvement in the process of coding the collected information. Table 2.3 – *Coding of Qualitative Data – A*, is the initial process.
of coding that will be used in this study to facilitate the evolvement of a new theory on facilitating teacher learning. Following the presentation of the matrix for coding, a discussion will ensue on each step of the process. This will advance the type of analysis for each piece of data collected.

Table 2.3.

Coding of Qualitative Data- A

<table>
<thead>
<tr>
<th>Stage</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Codes- Open coding</strong></td>
<td>Identify anchors-key Points – Investigate a process of learning. Memoing- writing memos</td>
</tr>
<tr>
<td><strong>Concepts- Axial coding</strong></td>
<td>Coding similar content – grouped • Practice • Theory • Self Memoing</td>
</tr>
<tr>
<td><strong>Coding Descriptors</strong></td>
<td>• Practice- Overall improved practice. • Theory- knowledge about literacy theory. • Self- knowledge about the professional self.</td>
</tr>
</tbody>
</table>

The first part of the coding process will be to tease out some key points that lend themselves to the process of learning within a time of professional development. The second part is undertaken to narrow the information into similar groups of concepts. Since we are concerned with teachers in an educational setting where they are learning as part of a professional development group, we might establish concepts such as practice, theory and self. The third part of the process of coding involves using all the previous identified anchors and concepts to create specific categories. The resulting categorization will form the basis for a creation of a new theory. In this case we might see categories such as:

2. Knowledge about literacy theory – theory.

In summary, all observations, products and events will be coded using whether it was classified under practice, theory or self. The information from each observation, product and
event will be summarized. This summary will include each mention of practice or overall improved practice, theory or knowledge about literacy theory, and self which I classified as knowledge about the professional self. The information from the sets of data are coded and included as appendices.

The collection of quantitative data will be derived from two (2) areas of this study. The first is from the data listed as events situated within the timeframe of this study. It is expected that this information will be quantifiable. This will allow for a simple statistical analysis where results may be listed by using the mean and/or a percentage. This will be used to compare results and it will be reported as frequency tables or bar charts. The second set of quantitative data is expected to appear during the coding of the qualitative data. It is expected that during the coding, there will be instances where information is grouped, counted and reported as percentages. This would again be used as a means of comparison. In this case in point, every mention of the concept will be counted as part of the total using practice, theory and self. Again, it will be reported as a frequency table or bar chart.

During the evaluative portion of this study, it is expected that the types of data presented under the titles of conversations, events and products will be triangulated within the confines of the selected specific categories (see Table 2.3.) to form the basis of the closing theoretical contention(s).

**Limitations**

It is important to note that due to the lack of experience as a researcher, certain limitations were found to exist with regards to the collection of certain pieces of data. I found that I had a framework for the detailing and collection of data, but I should have had a concrete plan in place before beginning the study. This resulted in some issues that led to limitations within the reporting and collecting of data. The first issue detected was the lack of a file created on a complete audio recording of group sessions. I was so overwhelmed with my three roles that I somehow overlooked audio taping some sessions. Only certain parts of
sessions were recorded and in retrospect the whole session should have been recorded. With the recording of the complete session, the development over time of new theory, practice and attitudes about learning could have been expanded.

The second issue revolved around the collection of data on the Reading Recovery lesson records. More time could have been spent on recording teacher learning on this record as opposed to keeping a separate journal. This Reading Recovery lesson record should have been considered their journal of thoughts. It would have facilitated a richer collection of data on what the teachers were thinking and learning daily.

The third issue revolves around the construct validity of certain data collection instruments. The initial and final questionnaires, as well as the post interview, were not tested for construct validity before the collection of data. It is also important to be clear that the Innovation Configuration Map (2005) of polling attitudes on professional development was adjusted to the perceived needs of this study. It was again not put through a test for construct validity.

The fourth issue is that the group will construct its reality by acting upon their truth, and conversely by being acted upon within their group and educational environment. To be more specific, it might be concluded that the professional development group can’t be taken out of their overall sociological construct. The teachers are acted upon and they act upon the reality within a school board as well as within their own professional development group and especially by the Teacher Leader. I impacted this group in what I wanted them to learn, especially the add-ons beyond Reading Recovery.

An exemption is sought from the normal Standards and Guidelines from the Canadian Institute of Reading Recovery to form a group of five teachers in the professional development group. The minimum number within the group is at least eight (8). As previously mentioned, three of the group decided to be participants in this study. All data is collected from a small sample of three (3) participants. This is further compounded by
incomplete data sets while reporting on the learning of the teacher participants within this study.

**Judging the Research Design**

### Table 2.4.

*Criteria for Judging the quality of the Research Design*

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study tactic</th>
<th>Phase of research in which tactic occurs</th>
</tr>
</thead>
</table>
| **Construct validity** – Identify correct operational measures for the concept being studied. | • Use multiple sources of evidence  
  • Establish a chain of evidence  
  • Have key informants revise draft case study report  
  • Limitations  
  • Principles of data collection | • Before data collection  
  • Data collection  
  • Composition |
| **Internal validity** – seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions. | • Do pattern matching  
  • Do explanation building  
  • Address rival explanations | |
| **External validity** – defining the domain to which a study's findings can be generalized. Whether a study's findings can be generalized beyond the immediate case study. The external validity problem has been a major barrier in doing case studies. Analytical generalization, the investigator is striving to generalize a particular set of results to some broader theory. | • Use theory in single case studies  
  • Limitations  
  • Building a personal theory | • Data collection |
| **Reliability** – the goal of reliability is to minimize the errors and biases in a study. | • Use case study protocol  
  • Develop case study database  
  • Follow principles of data collection  
  • Recognize criticism of Reading Recovery | • Data collection |
Ethical Considerations

Throughout the creation of the research design, there was a constant effort to refer to the British Educational Research Association’s (BERA) Ethics and Educational (2004) regulations regarding the participation of individuals within any research project. The following considerations were reviewed, and where written permission from participants was needed, it was obtained, and stored in a secure area for future reference.

The ethical considerations for this project are listed as:

- Reading and discussing with a supervisor the British Educational Research Association’s Revised Ethical Guidelines for Educational Research (BERA, 2004).
- Reading and discussing with a supervisor the Research Code of Conduct of the University of Nottingham (2009, June 28).
- Awareness of and discussion with a supervisor the relevant sections of the Data Protection Act (1998).
- Data gathering activities involving schools will be carried out only with the agreement of the head of the school.
- The purpose and procedures of the research, and the potential benefits and cost of participating will be fully explained to the research participants at the onset.
- The researchers’ full identity and role within the educational system is revealed to participants.
- Participants were informed that data collected will be treated in the strictest confidence and will only be reported in anonymous form within the boundaries of the research objective.
• All participants were asked to give explicit, written consent to participate in the research, and where consent is given, both researcher and participant will have a copy of the consent.

• Undue pressure will not be placed on individuals or institutions to participate in research activities.

• The treatment of research participants will not in any way prejudice their involvement, in the Reading Recovery professional development, if they choose not to participate.

• All participants are provided with contact details (and those of a supervisor), in order that they make contact to any aspect of the research, should they wish to do so.

• Participants are made aware that they could freely withdraw from the project at any time without risk or prejudice.

• Research will be carried out with regard for mutually convenient times and negotiated in a way that seeks to minimize disruption to schedules and burdens on participants.

• At all times during the conduct of the research, the researcher will deem to behave in a professional manner and will take steps to ensure that neither the researcher nor the research participants were placed at any risk.

• The dignity and interests of the research participants will be respected at all times.

• The views of the participants will be greatly respected and sought in the creation of this project.

• Special efforts will be made to be sensitive to differences relating to age, culture, disability, race, sex, religion and sexual orientation amongst research participants, when planning, conducting and reporting on the research.

• Data generated by the researcher will be kept in a safe and secure location and will be used purely for the purposes of the research project.

• Research participants will be given access to any data kept on them.
All necessary steps are taken to protect the privacy and to ensure the anonymity and non-traceability of participants.

As an administrator within a school board, an Advanced Criminal Records disclosure form has been completed, which is included in a permanent employment file.

In following these ethical standards put forth by BERA (2004), the participants may feel confident that the ethical integrity of this project is grounded in epistemological and ontological principles that will guide in the formation of a new theory built around learning and professional development.

**Ascertaining the Strengths and Weakness of this Case Study Design**

The written works of some key people (Yin, 2009, Merriam, 2009, Bryman & Teevan, 2005, Stake, 1995 & 2006,) in the field of conducting case studies advocate that there are key strengths to committing to and carrying out research in the field. The case study protocol is laid out to draw on these noted strengths of a case study method of conducting research.

They advocate that:

- A case study is analogous to a single experiment, and many of the same conditions that justify a single experiment also justify this research. Its classification also includes it as an empirical inquiry that follows a systematic procedure.

- A case study is not limited in scope and sequence. It may represent a simple or extreme case in the field.

- A case study is meant to represent a typical occurrence and to capture the circumstances and conditions of everyday or commonplace situations, but it is also a form of inquiry that does not depend solely on ethnographic or participant-observer data.

- A case study investigator has the opportunity to observe and analyze phenomenon in a social setting, and may be valued as an adjunct to an experimental procedure rather than as an alternative to them.
• A case study allows for studying the same group over a period of time; this can help track anticipated stages at which the changes might occur. With a mixed method of data analysis, more complicated research questions may be addressed by the collection of richer and stronger array of evidence.

• A case study opens up a research design that deserves consideration where ontologically the constructionist point (Bryman, & Teevan, 2005) to the fact that the active role of an individual in the social construction of a social reality does exit and offers epistemological value to the field of education. These same key people (Yin, 2009, Stake, 1995 & 2006, Merriam, 2009, Bryman & Teevan, 2005) are also mindful that there are many critics to this type of study. It is important to acknowledge the possible pitfalls to this type of study. It is important to keep in mind the case study protocol laid out in this methodological framework would enable this researcher to argue the validity and reliability of the results. That protocol was created to answer the following concerns regarding case study research. The concerns are listed as:

• A case study researcher being accused of lack of rigor in data analysis because there are no randomized field trials or “true experiments”, which allows for little basis for scientific generalizations.

• A case study generated by members in the field are tasked with fairly reporting all evidence, which leads to the contention that there is a limitation in the ability to explain “how” and “why”, which ultimately leads to accusations of bias on the part of the researcher.

• A case study is difficult to complete because it takes time and the results often lead to massive, unreadable documents.

• A case study protocol which defines the specific skills has not been formally defined and this may lead to confusions on what constitutes researching and reporting cases.
• A single case study design is vulnerable because any analytic conclusions that would arise are based on one ontological perspective. The information would not be as powerful as those findings coming from a multiple case study design.

• A single case study design may also lead other professionals in the field to question this researcher’s ability to do empirical work beyond a single case study.

• A case study’s validity and reliability may be questioned because of a lack of control over the data collection environment. It could lead to questions of possible failure to replicate the results under similar conditions.

Looking Forward – Creating a Theory

Moving on from the concrete methodological framework necessitates situating the research group in an ontological context that will help to explain the epistemological value of the resulting theory. Throughout the study the three (3) participants must be considered social entities with a reality that is constructed from their perceptions of their involvement in professional development to foster learning (Merriam, 2009). The foundation of where the reality of this study resonates for this body of work is multi-facetted. This chapter began with a discussion of ontological and epistemological perspectives. It is important to understand that threaded throughout this study will be the Objectivities’ ontological (Bryman & Teevan, 2005) position as well as the Constructivism’s ontological (Bryman & Teevan, 2005) position based on:

• Placement in Canadian society.

• Placement within the school board.

• Placement and engagement within the process of professional development.

• Engagement and cohesion of the group studied.

The development of a new theory grounded in the research depends on the ontological perspective of the participants, the background information or theory on the perceived problem, and the new information collected from the data to solve the studied problem and
bring epistemological closure to this project. The formation of this new theory begins in Chapter 3 – *Navigating the Tides of Change*. 
Chapter 3
Navigating the Tides of Change

Building a Theory

The goal of this study is to understand and improve practice in the field of offering professional development to teachers in an educational system. Having been part of the Reading Recovery family for the last 10 years as a Reading Recovery Teacher Leader, many teachers have passed through the initial Reading Recovery professional development. It was observed that these groups of teachers were more apt to move on to administrative positions, either at the district level or at the school level. How did the professional development contribute to this phenomenon? What did these teachers learn that contributed to this fact? Reading Recovery teachers were working hard with the children they were seeing in Reading Recovery, but what was contributing to them being better teachers and administrators? The question that was really interesting was: If Reading Recovery teachers are considered exemplary, (Burroughs-Lange, 2009, Burroughs-Lange & Douetil, 2007, Pressley & Roehig, 2005, Herman & Stringfield, 1997, Pinnell, Lyons, DeFord, Bryk & Seltzer, 1994) what contributed to their development as exemplary teachers?

It is gratifying that teachers were open to being part of this study. But, it meant that they were the sole focus of the study. At times, they wanted to be left alone to process what they were hearing and seeing. They weathered through the year and they survived intact. Their names have been changed to protect their anonymity as required by ethical considerations (BERA, 2004). The study group, consisted of three (3) participants. All the teachers had graduated with a Bachelor of Education, with a focus on Elementary Education. One of the teachers had spent most of his career working with adults and was relatively new to teaching young children to read and write. Two of the teachers were in their third or fourth years of teaching and were teaching young children in either a classroom or resource setting. In summary, all teachers had and were teaching young children to read and write. They
chose to be part of the process of professional development to become Reading Recovery teachers.

In previous years, when offering initial Reading Recovery professional development it was offered with an assumption that most teachers were not familiar with the theory put forth by Clay (2005) on how young children learn to read and write. Clay (2005) best summarizes this theory as teachers aiming to produce independent learners whose reading and writing improved whenever they read and write. Specifically, children become independent (Clay, 1993, 2001, 2005) when:

- Early behaviors are appropriate, secure and habituated.
- If they learn to monitor their own reading and writing.
- If they search for several kinds of information, in word sequences, in longer stretches of meaning, and in letter sequences.
- They discover new things for themselves.
- They check that one kind of information fits with other available information.
- They repeat themselves as if to confirm what they have read or written.
- They correct themselves, taking the initiative for making any sources of information they have found fit neatly together.
- They solve new words by any means.

This year, for the purpose of this study, it was decided that it was not appropriate to assume that teachers were not familiar with the central tenants of reading and writing theory. It was important to discover what general repertoire of knowledge about reading and writing each participant was beginning this period of professional development. The resulting discussion is based on the administration to teachers of a self-assessment tool (see Appendix C). There was a duel focus to this self-assessment process. The first was to get a general idea of understandings regarding certain concepts that could be discussed within Reading Recovery and also beyond that, while involving the present day education system. This is
classified as the first section. The second part was to get a sense of their own theory regarding reading and writing and how they were teaching children to read and write. This part is classified as the second section. This tool was administered in September 2008, and again in June 2009 when the professional development period was terminating. This self-assessment tool was not part of the original design of Reading Recovery, but was included to collect more information regarding the learning process. The results are presented to show the change over time in their perceptions of what they learned over an academic year of study.

The presentation of the information is divided into two (2) organizational units. The first section consisted of showing the teachers’ change over time in their attitude towards their learning. The second section reports on their attitude towards literacy theory and practice over time, from the beginning to the end within the period of the professional development. The reporting of these data attempted to gauge attitudinal changes of learning that happened over the year.

**Change Over Time in Learning**

After the first meeting, the teachers were asked to seriously think about what they knew about teaching children to read and write. This would include their university initial teacher professional development and their years of teaching experience. A self-assessment document was developed that would meet the needs of this study (see Appendix C). This tool consisted of two (2) sections:

- Section 1 – Likert Scale
- Section 2 – Questionnaire

Both sections revolved around the teachers’ work and involvement within the process of professional development to teach children to read and write. Their theory, attitude and how they practiced teaching young children to read and write in their particular educational setting was sought. The self-assessment document was administered in September 2008 and
again in June 2009. The Likert scale was constructed to include aspects of the learning that are inherent in teaching young children to read and write. The first part of the self-assessment document sought to measure understandings around educational knowledge necessary in teaching and learning. The defining vocabulary was chosen because of the frequency of the use of the term or probability of them having to know what it means within their practice, which includes Reading Recovery. Alternative assessment and inclusion are considered important in the current climate of educational policy (Tri-County Regional School Board (TCRSB), 2004) surrounding Special Education in Nova Scotia, Canada. Action research and constructivism in the present system of school improvement in Nova Scotia (TCRSB, 2009, January 8) is an integral part of planning a personal plan of study to improve practice. Higher order thinking skills or metacognition (Bloom, 1956 & Marzano and Kendall, 2007) are foundational constructs in understanding how we learn as adults. There was no discussion of the concepts before the administration of the document. The first question posed included:

How familiar are you with the implications and applications of:

- Alternative assessment? The Learning Points Associates™ group (2011, June 8) ascertains that any assessment, criterion- or norm-referenced, used to assess children’s acquisition of outcomes used to create a response to a question or task.
- Inclusion? Considers that all students are full members of the school community and they are entitled to the opportunities and responsibilities that are available to all students in the school (NSDOE, 2004).
- Multiple intelligences? We learn by a multitude of ways (Armstrong, 2009).
- Constructivism? We construct together from mediated action. Constructivism is a theory of knowledge or epistemology that argues that humans generate knowledge
and meaning from an interaction between their experiences, ideas and while
interacting with others (Kim, (2005).

- Higher order thinking skills – Critical thinking and reflection. The idea is that some
types of learning require more cognitive processing than others, but also have more
generalized benefits (Bloom, 2009 August 19).

- Metacognition - Metacognition refers to higher order thinking which involves active
control over the cognitive processes engaged in learning (Livingston, 2011,May 8).

The respondents were asked to rate their understanding for each category as very
familiar, somewhat familiar, heard the term or unfamiliar. A simple statistical procedure was
then used to collate the results. A measure of central tendency was used to allow for a
showing of a frequency distribution. Two frequency polygons were then used to make and
show comparisons of the change over time in learning. It is important to clarify that there is
no reporting of the results on multiple intelligences. This was decided because of a possible
confusion and the multiple ways of viewing the term multiple intelligences. I simply meant
to poll the opinions of the teachers on their knowledge on the different ways of learning, and
I should have used different terminology to gage a response. The Likert Scale was scored by:

<table>
<thead>
<tr>
<th>Very Familiar</th>
<th>Somewhat Familiar</th>
<th>Heard the Term</th>
<th>Unfamiliar</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The most any one teacher could score was a total of 24 points on the scale. All
respondents’ who completed the questions pre and post professional development are
reported. This was done because it is easier to see the changes that took place in learning if
we look at individual opinions. It was important for the teachers to relate their progress
according to how they understood their change in learning over time. Please remember that
the following data are teachers’ opinions of their change over a 10-month period of study.
Section 1 – Likert Scale

The first section of the self-assessment document is a Likert Scale, which is used in this case for the polling of understandings of learning over the year of professional development. Three teachers were polled twice during their year of professional development, which encompassed September 2008 to June 2009. If there was not a change over time in learning, during this period of time, then reporting on the type of professional development undertaken would be mute. The professional development would have been ineffective, and not worth reporting and repeating. Therefore, it was decided that the reporting of results from the self assessment tool’s administration was important to be reported first. This means that the change in the teachers’ learning was reported first. Section 1, the Likert Scale, and Section 2, the Questionnaire, report the changes over time within the participant’s understanding of their own learning. It reports general assumptions as asked for on the assessment tool, but little as far as specifics of learning. If there is change to their learning, then it would be appropriate to continue with a study to investigate and understand the initial problem of this study.

This section is reported teacher by teacher to show change over time in their personal understandings. The Likert Scale was administered in September 2008 and again in June 2009 and reported as part of the whole case.

Participant # 1 – Erica

Erica is an elementary classroom teacher whose responsibility includes teaching young children to read and write as well as studying to teach Reading Recovery. When perusing the following figure, there are obvious representations of the change over time in her understanding of the listed topics with the Likert Scale.
Figure 3.1. Erica’s Learning – Change Over Time, September 2008 to June 2009

In September, Erica felt that she understood metacognition (g), as she stated that she was very familiar with the theory surrounding the concept. She also felt well-versed in alternative assessment (a), inclusion (b), and higher order thinking (f). Also noted, that in September action research (d), and constructivism (e) was a relatively unknown concept. Over the year, there was a visible change in understandings, and in June she was now somewhat familiar with the concepts. Over the year, it was evident that Erica’s opinion on what she now knew had changed, and she felt that she had built on all her understandings. Change over time was easily shown, but it is important to represent the change in a different way. In using the range of the numbers on the Likert Scale, it was easy to equate a score to each question. A perfect score would be a tally of 24 points. Table 3.1. – Erica’s Self Report, tallies the self-report on her perceived learning, over the period from September 2008 to June 2009.
Table 3.1.

**Erica – Self Report, Perceived Level of Learning, September 2008 to June 2009**

<table>
<thead>
<tr>
<th>Question</th>
<th>Sept. 2008 Term 1</th>
<th>June 2009 Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3/4</td>
<td>3/4</td>
</tr>
<tr>
<td>B</td>
<td>3/4</td>
<td>4/4</td>
</tr>
<tr>
<td>C</td>
<td>2/4</td>
<td>3/4</td>
</tr>
<tr>
<td>D</td>
<td>2/4</td>
<td>3/4</td>
</tr>
<tr>
<td>E</td>
<td>3/4</td>
<td>4/4</td>
</tr>
<tr>
<td>F</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17/24</td>
<td>21/24</td>
</tr>
</tbody>
</table>

In term 1, or September 2008, Erica felt that action research and constructivism were her major weaknesses. She scored 17 points out of a possible 24 points on the Likert Scale. As her second response indicates in June 2009, her knowledge had increased by a representation of 21 points of the possible 24. Her understandings of action research and constructivism had increased. With the sum of the scores, it was then possible to gage a percentage of change over time in learning. This was used to show overall change over time in understandings for the period of professional development. Overall, her score has increased to 21 out of a possible 24 points on the Likert Scale. In essence, if we translate those numbers to a percentage, we see that Erica has indicated that change in knowledge had increased from 71% to 88% over the period of professional development.

Table 3.2.

**Erica – September 2008 to June 2009, Overall Change Over Time in Learning**

<table>
<thead>
<tr>
<th>September</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>71%</td>
<td>88%</td>
</tr>
</tbody>
</table>

After a full 10 months of Reading Recovery professional development, she answered that her understandings had increased from 71% to 88% over the year. This is a difference of 17% increase in what she had reported knowing in September. If you again look at the
frequency distribution figure (see Figure 3.1.) and the differences in percentages reported (see Table 3.2.), you see that her confidence regarding her knowledge about alternative assessment, inclusion, action research, constructivism, higher order thinking and metacognition has increased her personal knowledge by 17% over the year.

Participant # 2 – Nora

At the time of this study, Nora was a resource teacher and all her teaching experience was at the lower elementary level. She had been teaching for about eight years. Nora completed the self-assessment tool in September 2008 and again in June 2009, at the end of the initial Reading Recovery professional development. Figure 3.2. – Nora’s Responses, represents the change over time in her opinion, of her own learning.

Figure 3.2. Nora’s Responses – Self Report on Perceived Learning

![Nora's Responses Graph](image)

As we see, Nora felt that her knowledge had increased in all but alternative assessment (a) and metacognition (g). The biggest difference was the increase in her understandings around the theory of constructivism (e). It was important to see growth in the two areas that she considered her major weaknesses. She was still not sure of action research (d) and what it meant to her. It was gratifying that she felt that her understandings of higher order thinking (g) had increased, but in June she was questioning her understanding around
inclusion (b). In using the range of numbers on the Likert Scale, it was again easy to allocate a percentage to the growth in Nora’s perceived understandings from September to June. To do this, it is necessary to quantify each question, so that a final tally for each term may be achieved. This tally is used to compare the change over time. Table 3.3., represents this comparison.

Table 3.3.

*Nora’s responses – First and Last Term, September 2008 to June 2009*

<table>
<thead>
<tr>
<th>Question A</th>
<th>Question B</th>
<th>Question D</th>
<th>Question E</th>
<th>Question F</th>
<th>Question G</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2008 Term 1</td>
<td>3/4 4/4</td>
<td>1/4</td>
<td>1/4</td>
<td>¾</td>
<td>3/4</td>
</tr>
</tbody>
</table>

Nora felt that she had limitations in her understandings or no understanding of action research and constructivism. Overall, in the first term, she considered her understandings of the listed concepts to be at approximately 63% of a possible 100%. After completing the 10 months of Reading Recovery professional development she indicated that her understandings had increased in the areas that she had originally flagged as challenging her understandings. Her overall score, in the third term, was now 79%, but action research was still a concern for her. She was also re-evaluating her understanding of inclusion. Overall, Nora considered her growth in understandings to have changed by 12% over the year.

Table 3.4.

*Nora – Change over Time in Learning, September 2008 to June 2009*

<table>
<thead>
<tr>
<th>September 2008</th>
<th>June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>79%</td>
</tr>
</tbody>
</table>
Participant # 3– Kelton

Kelton is an experienced teacher, but he had spent all but the last five years teaching adults. He had limited experience teaching young children to read and write. Kelton indicated that he was very familiar with the concepts until he came to action research (d) and metacognitive (g) understandings. He was questioning himself on the meaning of many concepts. He felt particularly vulnerable with his understandings of alternative assessment (a), action research (d), constructivism (e), higher order thinking skills (f) and metacognition (g). Figure 3.3. indicates the many areas of concern voiced by Kelton when he posted his opinion on the Likert scale.

Figure 3.3.  Kelton’s Learning – Self Report on Perceived Learning – September 2008 to June 2009

In looking at Figure 3.3. - Kelton’s Learning, it is evident from Kelton’s responses that he feels that his knowledge has changed over time. In quantifying Kelton’s responses, Table 3.5. – Kelton’s Responses, represents his answers to each question out of a possible score of 24.
Table 3.5.

Kelton’s response – Comparison, First and Last term, September 2008 to June 2009

<table>
<thead>
<tr>
<th></th>
<th>Question A</th>
<th>Question B</th>
<th>Question D</th>
<th>Question E</th>
<th>Question F</th>
<th>Question G</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2008</td>
<td>2/4</td>
<td>4/4</td>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
<td>10/24</td>
</tr>
<tr>
<td>Term 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Again, it is evident that he was unfamiliar with action research (d), constructivism (e), higher order thinking skills (f), and metacognition (g). With his answers in September 2008, he indicated that he understood about 42% (10/24) of content presented. Over the year, Kelton felt that he had progressed in his understandings. His answers in June 2009 indicate that at the end of the year he had increased his understandings to 71% (17/24), which is an increase of 29%. He was still uncertain about action research (d) and constructivism (e).

As Table 3.6. – Kelton-Change Over Time in Learning indicates, Kelton felt that he had made tremendous gains in building on his overall learning.

Table 3.6.

Kelton – Change Over Time in Learning, September 2008 to June 2009

<table>
<thead>
<tr>
<th>September 2008</th>
<th>June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Summary

Progress is evident in learning over time for those who completed section 1 of the self-assessment document. The initial results in September 2008 indicated that a concerted effort must be set in developing an increased understanding of action research and constructivism. Table 3.7., Indications of Understandings, is a summary of the concepts that teachers had expressed an overall concern with in September 2008.
Table 3.7.

*Indications of Understandings – September 2008*

<table>
<thead>
<tr>
<th>Erica</th>
<th>Nora</th>
<th>Kelton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Research</td>
<td>Action Research</td>
<td>Action Research</td>
</tr>
<tr>
<td>Constructivism</td>
<td>Constructivism</td>
<td>Constructivism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Metacognition</td>
</tr>
</tbody>
</table>

In September 2008, the first constant is that all teachers had issues with their understanding of action research and constructivism. The second constant is the fact that two of the teachers did not understand the underlying concept of metacognition. As indicated in June 2009, there were still some concerns expressed by teachers. Table 3.8., *Indications of Understandings-June 2009*, summarizes the concerns expressed at the end of the period of professional development.

Table 3.8.

*Indications of Understandings – June 2009*

<table>
<thead>
<tr>
<th>Nora</th>
<th>Kelton</th>
<th>Erica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Research</td>
<td>Action Research</td>
<td>No concerns</td>
</tr>
<tr>
<td>Constructivism</td>
<td>No concerns</td>
<td></td>
</tr>
</tbody>
</table>

These concerns were expressed by the teachers when they indicated (see Table 3.8.) that they had heard the term (2) or they were unfamiliar (1) with the term. An understanding of action research (d) was still a concern. Erica reported that she was familiar or very familiar with all concepts. It was assumed that everyone would record progress in understandings during a full year of professional development. As adults, we live our life by making meaning (Knowles, 1998) from our experiences. As adult learners, we have some different needs than children, but we still have to make sense from our experiences. If meaning is not made from our experiences, we do not add to our bank of background
experiences. It was important to understand the participants’ beginning knowledge so that professional development could be properly prepared and executed to build on to their construct. Most participants began the year with limited understanding of action research and constructivism. Both are very important to teaching because of the implications around assessment “for” learning and assessment “of” learning (Davis, 2007) on teaching practice.

Section 1 of the self-assessment survey was an attempt to begin to understand that there is change over time in learning. The responses on this part of the assessment tool gave a general overall indication that learning had taken place during the year. A rationale now must be built through understanding the underlying theory that will explain learning over time. That will help to ground the data within current educational theory. This will lead to the theoretical underpinnings and allow for a greater understanding of why there was an indication from participants that they had changed their learning over time.

Ontologically, this group of teachers will begin to build their understandings from their participation and involvement in their social reality. Merriam (2009), when discussing research, indicates that this group of teachers will have two factions at work that will aid or detract from their learning. The objectivism school of thought implies that a phenomenon confronts the individual and exerts pressure to conform while the constructionists’ advocate that these teachers will be an active player in the construction of their own reality (Merriam, 2009). This group will be confronted with both factions that will help to build their realities around learning within the Reading Recovery group, but also within their fit into their present educational setting.

The Realities of Learning

The educational system in Canada is decentralized. Schools, the curriculum and teacher certification are controlled provincially by a Department of Education whose head is an elected provincial minister. The departments of educations are not uniform across the
Country because of the specific requirements and needs of the Canadian population (Sheehan & Fullan, 1995). Canada is large and needs do differ by region.

All initial teacher education programs are located at the University level. Teacher education in Canada has mostly been located in faculties of education in universities for the last quarter of a century. In Nova Scotia, The Nova Scotia Teachers’ College closed its doors in the early 1990’s, thus transferring all initial teacher education to the universities (NSDOE, The Shapiro Report, 2000). In Nova Scotia there are seven regional Anglophone school boards, which enroll 97.2 percent of all public school students. The provincial school board for Acadian/Francophone students, known as the Conseil Scolaire Acadien Provincial (CSAP), includes the remaining 2.8 percent of students. Nova Scotia’s total public school population was 145,396 from primary to grade 12 in the 2004 –2005 school year.

Fullan (2001) states that the history of intensive educational change is less than half a century old. He characterizes that change as having five stages, starting in the 1950’s. Large scale reform (Fullan, 2001) of the educational system took flight in the 1990’s. The Canadian Education Association (CEA) (1992) characterized those reforms as centering on government commitments to greater accountability and improvement of student achievement. The Canadian Education Association is a research and action center that was created to influence educational transformation and reform in Canada.

More specifically, in Canada, these reforms are characterized as including:

- Standardized province-wide student achievement tests.
- Province-wide school and district improvement initiatives focused on student achievement in mathematics and literacy.
- Revised curriculum to outcomes-based.
- Investment in the implementation of smaller size classes.
- Contribution to the creation of multi-sector involvement.
- Implementation of reforms to improve high school involvement.
• Introduced new programs to support increased parent and community engagement in learning and school level decision making.

Fullan (2001) simply describes these initiatives as powerful usable strategies for powerful recognizable change. But he is clear that a recognizable change requires intensive action over several years to combat the isolationism and privatization of education at the classroom level. With the pace of change, it is now more than ever important to have a globally informed populace, which is prepared for continuous change in the field of education. Efforts are being made to include and encourage continued learning at the grassroots level. Lifelong learning (Office of Lifelong Learning (OLL), 2009) must be modeled and practiced by teachers so that their students see its value and function. The fast pace of international developments and current economic globalization has necessitated fast-paced changes in education (Hudson & Lambert, 1996).

The CEA (2007), from their data collected, describes the changes within Canada, but it is necessary for me to narrow the scope to the initiatives relevant to education in Nova Scotia. The following section is a simplification of the changes that occurred and continue to occur within the field of education in Nova Scotia, Canada. The goals of this examination are to indicate how Nova Scotia has attempted to move forward, with teacher learning (NSDOE, Report and Recommendations, 2009) in this time of fast paced change within a system. This is mentioned here because of an overall emphasis on professional development and how it impacts the view on teacher learning. These changes directly impact all teachers who are part of a system while undergoing a process of professional development. This includes the teachers who are part of the Reading Recovery professional development because they are a subculture of the whole. Two areas of change were specifically sought:

1. An up-to-date student curriculum, and

2. A means for continued teacher professional development.
Education in Nova Scotia, as any similar system, has a hierarchy. This hierarchy begins with the Minister of Education who is an elected government official and the system is his or her ultimate responsibilities. The Minister of Education has a Deputy Minister who is responsible for a Department that helps in the overseeing of all educational initiatives. The Deputy oversees research initiatives, as well as planning and implementing new curriculum initiatives at the grassroots level. Like all government bureaucracy, the Nova Scotia Department of Education is a complicated system and the structure is better explained in The Nova Scotia Department of Education Business Plan (2009 –2010). This plan focuses on initiatives to move the education agenda forward within the province.

Since 1999, students, parents, teachers, school board members, and taxpayers have had more opportunity than ever before to express their views concerning education. Through this sharing of ideas came the first three-year plan to move education forward in Nova Scotia. In 2001 – 2002 the Nova Scotia Department of Education put forth its first phase to modernize the educational system in Nova Scotia. In Learning for Life– Planning for Student Success (2002) a three-year plan was put in place. It was based on a notion that students need a solid foundation in the early years, including support for pre-school children and smaller classes when children start school. The plan put the focus on reading, writing and math skills for all students. The teachers taking part in this study were motivated to learn by the overall goals (NSDOE, Report and Recommendations, 2009) of the province and district in relation to children becoming literate.

In 2005, at the end of Learning for Life 1 – Planning for Student Success (NSDOE, 2002& 2005), the results were evaluated and the next steps were discussed and planned at a Partners’ Forum in February 2005. The goal was to continue with the vision of the early years but also continue to shape a new direction for Nova Scotia’s education system. Learning for Life 2 was initiated with a clear view for the future of education in Nova Scotia. There were some clear messages sent to the educational stakeholders through the publication
of the Learning for Life 1 and 2 documents (NSDOE, 2002 & 2005). Two of these messages were that student success was the first priority and that quality teaching was the next priority.

Up until the implementation of Learning for Life (NSDOE, 2002 & 2005) Nova Scotia was proficient in offering isolated episodes of professional development days during an academic year. The education system recognized that this was not sufficient for a system that wanted to realize the changes necessary in education for the 21st Century. A school improvement planning (NSDOE, 2005) process had previously been implemented and used to move schools forward, but it was lacking depth and the changes sought were minimal. This was a good beginning, but the process was reworked to make it more inclusive of school communities within the 21st Century.

Consequently, in Nova Scotia, a plan was put in place that would encompass three (3) categories of teacher learning. This was a facilitating process to help all teachers learn at their own level, based on the priorities of an up to date curriculum and a process of school improvement through teacher learning. During this time, new priorities were set in Learning for Life 1 & 2 (NSDOE, 2002 & 2005) that enabled the schools to set smart goals. Smart goals (Haughey, 2009 July 30) are considered to be specific, measurable, attainable, relevant and time-bound. Since there now was a need to measure these goals, a system of school accreditation (NSDOE, 2005) was implemented within the province. This is considered an inclusive process that asks all members of the school community to be involved in school improvement that revolved around student and teacher learning.

With the new priorities set in Learning for Life 1 and 2 (NSDOE, 2002 & 2005) the school improvement planning process was formalized (TCRSB, 2009) in what is referred to as the Accreditation Process (NSDOE, 2005). One of the goals of the province and district was to insist that teachers know how to teach children to read and write. The teachers in this study surmised that Reading Recovery professional development could help them develop that understanding. It could be a motivational factor in their participation in the Reading
Recovery professional development. The Nova Scotia Department of Education put a plan in place that could facilitate a process of professional development that would foster learning. It was hoped that this process would meet the needs of all teachers. In following the Learning for Life educational plans (NSDOE, 2002 & 2005) it was now the responsibility of the Board’s administrative staff (TCRSB Board Business Plan, 2006-10) and school leadership to see that the school accreditation process would take place. Leadership must be shown, and part of that leadership is knowing the best processes of planning and facilitating teacher professional development in today’s society. Planning and facilitating professional development (NSDOE, Report and Recommendations, 2009) must be undertaken to support learning. With pressures from outside agencies on teachers, as well as their own code of professional accountability, how is it possible for teachers to build on that continuum of learning within present day society? This research has shown that teachers within the Reading Recovery group have learned, but what could be a theoretical basis for the learning that occurred over their period of time in Reading Recovery?

**Postulating a Theoretical Basis for Learning**

Learning has changed in the 21st Century. To successfully face higher education coursework, career challenges and a globally competitive workforce, schools must align classroom environments with real world environments by infusing 21st Century skills within the curriculum. The Partnership for 21st Century Skills report (PCS, 2009 March 2) advocates for the integration of specific skills into the core areas of math, literacy, science and history. More specifically, these are the habits of mind which Costa & Kallick (2000) advocate as being the processes necessary to succeed in today’s society. These skills or habits of mind are grouped as learning and innovations skills, information media, technology skills, life skills, and career skills, while including core subjects with 21st Century themes. What were once considered essential learning outcomes have been expanded and are now more focused on problem solving skills within all educational domains (PCS, 2009 March 2).
These skills, within Canadian society, include competence with information and communication skills, good interpersonal and self-directions skills, and also an inclusion of global awareness and a financial savvy to not only survive but to thrive within our own environments. The technological era has forced the issue of instant access to information and the need to now quickly process and decide on a course of action with information. Life-Long Learning (OLL, 2009) is needed to keep up with the ever-changing societal need for current, relevant knowledge. In the present educational system, life-long learning is defined as learning from the cradle to the grave for both personal and professional enrichment with the focus on the learner (Continued Professional Development (CPD) institute, 2009 April 17).

If learning has changed, the need for teaching to change has also intensified and become necessary. With the instant access to information and the need to quickly process that information, students must not be taught only content, they must be taught to use that content. Today’s students need an ability to apply their learning in different settings so that they have an interest to continue to learn. The Partnership for 21st Century Skills report (2009 March 2) advocates scalable and sustainable models of professional development for teachers which will deepen understanding of subject matter that can actually enhance problem solving, critical thinking, and other skills necessary in the 21st Century. We must live in a perpetual state of inquiry (Clay, 2005) where the focus is on learning.

Teachers are feeling the pressures of that needed change within their practice. As Adams and Tulasiewiz (1995) stated, it is not enough to be solely a transmitter of information. This alone will not accomplish the needed goal of beginning the students on a journey of life-long learning. Teachers are going to need the support of continued professional development within their practice (Cook, 1996) to make effective changes in the acquisition of knowledge and the application to practice. It is important, when planning continued professional development, that consideration of certain points be of paramount
importance to teachers who are learning in the 21st Century. Knowledge acquisition and the learning process must be studied to tease out an understanding of how change over time happened in learning for the group of teachers participating in this study. Fundamentally, teachers need to have a basic understanding of how they learn, thus helping them to understand how children learn (Mind Tools, 2009). Educational professionals who understand the relevant aspects of brain development and who use the strategies derived from research become more effective and exciting and will find students more engaged (Willis, 2006). Like an exercised muscle, the brain develops through repeated use. A basic understanding of the brain is necessary to understand higher order processing of information, which in its basic form is learning. The three respondents in this study never indicated that they had concerns with their understanding of higher order processing of information. As teachers, we are in constant motion, sampling our environment through our senses and expressing our views through our ability to communicate. Our motor system continuously relays information to our brain to help in the process of learning (Wolfe & Nevills, 2004) with a reformation of theories. This is how we build on our understanding of our own reality. Within Reading Recovery professional development a process to understand a phenomenon is explicit. It is through the use of language that new ideas are tried, thus helping to formulate or reformulate understandings (Pinnell, 1991).

Our brain is in constant use by surveying our internal and external environment to determine what’s important or relevant to us at that moment. There will be no learning if attention, memory and problem solving are not activated through a motivation of the individual activities. Because of the Accreditation process (NSDOE, 2005) teachers are tasked to undertake professional development that will help them learn about curriculum issues. Since the inception of Learning for Life 1 and 2, the focus has been on reading and writing. This is a major motivational factor for Reading Recovery teachers. This will create the intrinsic and extrinsic motivation for action on a problem-solving activity. The following
Figure 3.4. – Engaging the Brain, is a summarized rendition of the works of Willis, (2006), Lyons (2003), and Brotherson (2005) on how we engage the brain to learn. Ontologically speaking, it is also possible to look at this process as the external and internal forces that will bring about change in learning.

**Figure 3.4. Engaging the Brain**

<table>
<thead>
<tr>
<th>Attention</th>
<th>Memory</th>
<th>Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical to learning</td>
<td>Internal to existence</td>
<td>Build neural networks</td>
</tr>
<tr>
<td>Can be passive or active</td>
<td>Conversations maintain personal memories</td>
<td>Complex interactions</td>
</tr>
</tbody>
</table>

Lyons (2003) calls this a priming of the internal and external systems. This intrinsic and extrinsic process leads to the motivation to learn. In summary, we need to experience relevant intrinsic and extrinsic sensory experiences, based on current educational needs that will stimulate the growth of brain functions for us to learn. With continued research on the function of the brain, it is now recognized that adults will continue to shape their brain, building pathways, thus promoting life-long learning (Wolfe & Nevills, 2004). If we focus on adult learning (Cross, 1981, Lieb, 1991, Mezirow, 1991) through continued professional development, we should expect teachers to be able to:

1. Have an opportunity to construct conceptual knowledge by being engaged in concrete, contextually-meaningful, problem-solving activities.
2. Have an opportunity to access previously learned information and add it to the new learning.

3. Have an opportunity to construct their own understanding by being engaged in sustained, focused conversations with a more capable other.

4. Have an opportunity to be actively involved in reorganizing thinking and constructing knowledge.

5. Have an opportunity to put it in practice.

The entire above criterion has been met through the process of Reading Recovery professional development. There is a system (Pinnell, 1991) of built in checks and balances that are created by time spent in discussion during the initial phase of professional development, on-going professional development and individual professional development. Teachers are learning skills to describe, analyze and make inferences around the evidence of learning that they have recorded during their teaching. When teachers are motivated and supported in their endeavors to learn, they will come to understand that they must live in a perpetual state of enquiry that builds on their previous base of knowledge (Clay, 2005). Learning and the application of that knowledge within their practice allows for mastery and the ability to continue building on present learning. Pinnell (1991) argues that an interactive staff development model where learning is the focus has to apply to both children and teachers. It is understood that the Reading Recovery professional development must develop the ability for teachers to engage in a process that will facilitate their learning of emerging, developing and autonomous behaviors in teaching children to read and write. Reading Recovery professional development is a prime example of an interactive staff development model and planners of professional development should continue to study its implications to teacher learning. The following Figure 3.5. – Reading Recovery Teacher Learning Framework, is a visual representation of a process that could help to understand the learning undertaken in Reading Recovery by this group of teachers that participated in this study.
We are truly blessed with an ability to continue to learn throughout our lives (Wolfe & Nevils, 2004). The ability of the brain’s plasticity allows an individual to reshape and reorganize previously learned material (Lyons, 2003). If we don’t practice and use the information stored, our efficient brains will prune these memories. The adage of use it or lose it is true in this instance. Multiple stimulation from our internal and external environments (see Figure 3.4) means that better memory will be possible. If data is cross-referenced, it becomes stored rather than memorized. Like an exercised muscle, the more alternative ways there are to connect with a memory, the more efficient the traffic, the more rapid is the memory retrieval. Reading Recovery is grounded in a theory of literacy acquisition where both children and teachers learn using an unusual lens (Askew, 2009). It is the act of continually reformulating a present theory. This builds on the theory that learning takes place through action on solving problems (Pinnell, 1991). This is a major focus of Reading Recovery professional development and it might lend some insight into the learning reported by this group of teachers. The Reading Recovery staff model is based on the
assumption that language is a key factor in building theories, because language is used to represent personal experiences to others and to refine and extend our own learning. The model of Reading Recovery professional development (see Figure 3.5.) is better explained by thinking of it as an umbrella of the theory surrounding that model of learning. It was meant to train specialist to prevent reading and writing failure by children. Simply stated, it is a process of test, teach, test and then re-teach (Watson & Askew (Eds.) 2009).

We can build stronger memory circuits by personalizing information, stimulating the senses, creating surprises that bring the brain to attention and relating the information to the previously known, and with that we can consider it mastered. It is there for us to use in novel situations. In planning professional development, maintaining alertness is crucial by having breaks with physical movement, and practicing different modes of instruction that will help build a positive emotional climate (Hatton, 2006). Our wary brain is continually challenging our internal and external environments (see Figure 3.4) to determine what is important or not. Primary emotions make us react to danger, while secondary emotions are acquired through experiences (Wolfe & Neville, 2004). Emotion builds memories and that is why, when working with adults in a school setting, it is important to remember the characteristics of adult learners (Knowles, 1998). Adults are mostly known as autonomous and self-directed if the material is relevancy-oriented to their present reality. Reading Recovery teachers are practicing on two fronts; as elementary teachers and as intervention specialists. It enables them to continually refine their own theories which are grounded in the specifics of teaching children to read and write. They must be respected as having accumulated a foundation of life experiences and knowledge in their personal and professional lives. Most adults are goal-oriented and can be motivated in many ways, if it is relevancy-based to their practice and builds on present understandings (Characteristics of Promising Professional Development (CPPD), 2009 April 17).
The major motivational aspects for an adult learner are not that different than for children. We are social beings (Vygotsky & Social Cognition, 2009 September 13) and relationships are important to us, so group work is important. The Reading Recovery staff development program (DeFord, Lyons, Pinnell (Eds.), 1991) is built on a framework that enables teachers to participate in group work on a continuous basis. It does not only depend on their time spent as a Reading Recovery teacher because group activity is a constant. It is guided by a Teacher Leader/tutor to facilitate conversations that build on understanding. The following Table 3.9. – *Group Work in Reading Recovery Professional Development*, represents that continuum of working in a group within Reading Recovery.

**Table 3.9.**

*Group Work in Reading Recovery Professional Development*

<table>
<thead>
<tr>
<th>Initial professional development</th>
<th>On-going professional development</th>
<th>Individual professional development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi-weekly</td>
<td>Every six weeks</td>
<td>As needed</td>
</tr>
<tr>
<td>• talking</td>
<td>• talking</td>
<td>• talking</td>
</tr>
<tr>
<td>• observing</td>
<td>• observing</td>
<td>• reflection</td>
</tr>
<tr>
<td>• reflection</td>
<td>• reflection</td>
<td>• refine</td>
</tr>
<tr>
<td>• refine</td>
<td>• refine</td>
<td></td>
</tr>
</tbody>
</table>

Guided by a Reading Recovery Teacher Leader/tutor

Motivational incentives for learning with adults also stem from an interest in personal advancement or because of some external expectations that can be personal or mandated by a place of employment (AGI, 2009 April 17). As with children, there are also some barriers to an adult learner being engaged in making meaning of what they are learning (California Association of Nurses (CAN) (1988). Adults have many responsibilities in and out of the classroom. If there is never time or money set-aside for teachers to undertake some
professional development, it creates a stressed, frustrated group of teachers. These teachers can create barriers against participating in learning activities because of external constraints.

The goal of any learning is the idea that transference of that learning will take place in practice (Knowles, 1998). So, if you are working with adults, remember that any professional development has to make sense and be associated to present day needs. Then the information can be built into what they already know (Characteristics of Promising Professional Development Programs (CPPD), 2009 April 17). The best professional development can be derailed by lack of time and a lack of resources. Another way to sideline good professional development is to tap into negative emotions around learning. Emotions are one of the biggest influences (Lyons, 2003) on effective learning and change. How often are you in a situation of offering professional development and a person in your group taps into the emotional reserve of the remainder of the group and your professional development is derailed?

Jacobs (2010), who is the executive director of the Curriculum Mapping Institute and president of Curriculum Designers Inc., postulates that we must start looking at teacher learning in a whole different way. In 1956, Bloom created a taxonomy of knowledge domains. His overarching view was that we must build on our present knowledge through theory, skills and attitudes to undertake a process of learning. In 2007, Marzano and Kendall wrote about a new taxonomy that is multidimensional. It did not only include what we must learn, but it included a process of how we might learn. Their taxonomy was an attempt to better classify and expand other taxonomies, which included Bloom’s (1956) within the complex nature of learning. They subsequently argue that a person has a three-tiered mental system at work to make learning of theory, skills and attitudes possible. The first tier in their taxonomy is the self-system and it is used to determine the motivation one brings to a task. This may be linked directly to how we use intrinsic and extrinsic stimuli in engaging the brain (see Figure 3.4) and also about how we promote attitudinal shifts in individuals.
Attention, memory and problem solving must be activated to motivate an individual to learn. The second tier is classified as the metacognitive system. Metacognition is defined as a process that enables students to benefit from their instruction and influences the use and maintenance of strategies (Livingston, 2011 May 8). The learner is provided with both knowledge of cognitive processes and strategies and experience or practice. Simply providing information without experience or vice versa does not seem to be sufficient for the development of metacognitive control (Livingston, 1996). The objective is to enable all students to become more strategic, self-reliant, flexible, and productive in their learning endeavors (Marzano and Kendall, 2007). This is the system that effectively processes the information to complete the task. They describe the path to knowledge acquisition through a process of learning where they advocate for self-motivation through professional development to develop cognitive and metacognitive ability. These taxonomies, for the purpose of this study, are thought of as ways of engaging mentally in learning. Bloom listed the theory, skills/practice and attitudes as central to his taxonomy, but also important in this equation is gaining an understanding of how to facilitate learning within a process. Marzano and Kendall (2007) updated Bloom’s taxonomy (1956) of learning to include a process to engage in learning. They lay bare what must be done, within a process, to build on theory, skills/practice and attitudes towards self determination of own needs to create new knowledge. We must now delve deeper into what makes learning possible to keep teachers motivated (see Figure 3.4.) and engaged in learning new theory, skills/practice and changing attitudes toward their own learning (Bloom, 2009 August 18). This could possibly begin to explain the learning over time by the participants in this study. Physical engagement by participants in professional development must be planned and executed so that participants learn. Over the years, educational theorists have been postulating on how to best engage teachers in professional development. An examination follows, of what are considered by this researcher pertinent ways to engage teachers in learning. This is an attempt to shed some
light on how we might best learn new knowledge in present day society. This continuum of professional development is based on the notion that learning is a complicated process that includes many opposing theories on how we learn.

Marzano and Pickering & Pollack (2007) along with Reber (2001) have proposed that some procedural learning of knowledge is necessary to the field of education. Much of what is taught is based on knowing certain procedures or the performance of some task and that knowledge would be more focused on skill acquisition (Bloom, 1956). Procedural engagement by a participant in professional development is normally characterized by a notion that conscious understanding is not required and information could be passively received (Social Constructivist Theory (SCT), 2006). This learning is instructor centered and could be seen as procedural. We have all been part of professional development where you sit in a room with a great number of other teachers and you are told what to do within your practice. This form of professional development is considered necessary to expose teachers to new knowledge, but it must be balanced with other forms of learning. It is a necessary part of a practice, but not the only part of a practice.

Vygotsky (2009 September 13) wrote about how, as social beings we learn from each other and build on each other’s knowledge. His theory of learning is generally known as social constructivism and knowledge is constructed through meaning. It’s all about thinking and explaining through reasoning (Costa & Kallick, 2000). Site based learning involves the creation of professional learning communities within the school and learning is community centered (Tinzmann, 2009). This is considered the cornerstone of teacher development where it must remain flexible, sustained and intensive (Young, 1998). This is where teachers have the opportunity of learning, putting in practice, discussing and perfecting their practice on site. The outcome of effective staff development must be the growth of a set of theoretical understandings where the teacher will make decisions and take action (Pinnell, 1991). As with Reading Recovery professional development, a supportive environment based on
student and teacher learning is sought. This is the level that must be in place as a follow up to the standardized or procedural form of learning to expand on the initial learning.

A self-directed approach (Dahms (Ed.) 2008) advocates that learning will take place when change is sought in an environment to make it a better place and is teacher centered. This study places all responsibility on the teacher and includes action research and phenomenology research (Feiman-Nemser, 2009). Phenomology is defined for this purpose as a literal process of the study of a phenomenon. It is a study of a part of teacher’s reality.

They seek to actively understand and investigate a part of their practice (Smith, 2009). This learning does little to promote procedural learning, so normally it is advanced teachers who undertake this level of study. The whole process should be looked upon as a continuum of processes that is facilitated through professional development. Clarification of this process is offered in Table 3.10, *A Taxonomy of Teacher Engagement*.

**Table 3.10.**

*A Taxonomy of Teacher Engagement*

<table>
<thead>
<tr>
<th>Knowledge domains</th>
<th>Bloom (1956)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice/skills</td>
<td>Theory</td>
<td>Attitudes/determine own needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental engagement</td>
<td>Marzano &amp; Kendall (2007)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-system</td>
<td>Metacognitive</td>
<td>Cognitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural theory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructivist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenomenology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When will you learn?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It would seem that teachers must work their way through a continuum of mental and physical engagements to bring about learning. Pinnell and Woolsey, (1985) followed a group of Reading Recovery teachers for a period of a year, and it was revealed that continuous shifts in learning happened throughout the professional development. It could be proposed that teachers transform their theory, skills/practice and attitudes towards their own needs when learning something new by following a pattern that could be classified as building on different leveled learning. For the purpose of this study, this process is called transformative learning (Mesirow, 1991) and it will be further explored within the next section.

**Transformative Learning**

Transformative learning, for the purpose of this study, is defined as a cycle that promotes an understanding of how we might take on new learning. It may also lend insight into how to make planning for change easier. When referring to *A Taxonomy of Teacher Engagement* (see Table 3.10), we notice that the domains of learning are dependent on the mental and physical engagement of the participant. Rationally, if learning is a transformative process, it would seem plausible that there could be an argument made that there are different levels of learning within the physical engagement of a professional development process. It is proposed here that there are three levels of learning on a continuum. They directly impact the mental and physical engagement of an individual in a process of learning. These levels are classified as:

- Level 1 – Procedural
- Level 2 – Constructivism
- Level 3 - Phenomenology

**The Continuum**

**The First Level of Learning**

What are you telling me? This first level of learning (Bullemer, Nissen & Willingham, 1989) is categorized by a sharing of information. This type of professional
development is normally carried out with a large group of teachers present. Briefly
described, procedural learning and professional development is seen as focusing one’s
attention on overt, observable changes in a behavior. Repetition is encouraged until the
behavior pattern becomes automatic and is considered known. It is not personalized and it is
generic in nature. There could be an engagement of the brain, but only if attention, memory
and problem solving are involved as depicted in Figure 3.4. – Engaging the Brain. As
planners for these generic professional development sessions, one must meet a broad range of
interests (Tools for Schools, 1998). There probably would be little intrinsic and extrinsic
motivation to engage the learner in making meaning of the information (see Figure 3.4.).
This is a classic case of transmission of information or basic learning. Bullemer, Nissen and
Willingham (1989) consider this procedural step necessary for tasks that follow a step-by-
step process. It is necessary in instances where one must perform a task without the need for
conscious thought. In the field of education, consideration might be given to follow-up forms
of professional development. Change for teachers involved in Reading Recovery
professional development is a unit of learning in itself. When Clay (1997) decided to explore
implementing Reading Recovery internationally, she had to acknowledge that there was
much novel learning for teachers. She conceded that teaching procedures, learning to
question and challenge teaching decisions and task presentation would have to be learned
early on. This novel procedural work could be classified as the first level of learning during a
period of professional development. This possibly could take place within an initial period or
term of study.

The Continuum

The Second Level of Learning

What do others think? Teacher collaboration may take many forms, but the most
discussed in Nova Scotia’s educational environment is a Professional Learning Community
(PLC) (NSDOE Accreditation, 2005). Ongoing teacher education is promoted at the school
level through the formation of professional learning communities (DuFour, 2004). In its simplest form, a PLC is a group of teachers who meet to discuss and plan how they will better focus on instruction and student outcomes. Vygotsky (2009 September 13) has qualified learning as a social activity. So teacher collaborative endeavors that focus on student achievement should be encouraged and planned as part of professional development. The group that comprises the PLC will focus on increasing student progress through teacher education. The five major characteristics of a PLC are based on the summarized works of Kruse, Seashore & Bryke (1994). They propose that the following five points are necessary to create a successful PLC:

1. Reflective Dialogue – Members of the community talk about their situations and the specific challenges they face. Together, they develop a set of shared norms, beliefs, and values that form a basis for action. Members of the community can use these discussions to critique themselves, as well as the institution within which they work. The focus may be on subject matter.

2. De-privatization of Practice – Teachers share, observe, and discuss each other’s teaching methods with the help of peer coaching and lesson study (Brooks, 2009). By sharing practice, teachers learn new ways to talk about what they do, and the discussions kindle new relationships between the participants.

3. Collective Focus on Student Learning – Teachers are focused on student learning. They assume that all students can learn at reasonably high levels, and that teachers can help them, despite many obstacles that students face. Within a strong professional community, this focus is not enforced by rules, but by mutually felt obligation among teachers.

4. Collaboration – A strong professional community encourages teachers to work together, not only to develop shared understandings of students, curriculum, and instructional policy, but also to produce materials and activities that improve
instruction, curriculum, and assessment for students, and to produce new and different approaches to staff development for teachers themselves.

5. Shared Norms and Values – Through their words and actions, teachers joined in a professional community affirm their common values concerning critical educational issues, and in support of their collective focus. The time may be taken to address children and their abilities to learn, priorities for the use of time and space within a school setting, and the proper role of parents, teachers and administrators.

Following the five major characteristics of a PLC that are presented, one must also consider the importance of forming partnerships, voluntary participation and a commitment to performance (Day, 1999). These three strands build the foundational values of the PLC that drive change at the school level. The group also has to learn to build connections and to trust each other in the decision-making process. Collaboration and a willingness to respect views and opinions of other participants form the basis of that partnership. The group has to learn that involvement is crucial for the success of their professional learning community (Cerbin & Kopp, 2006). The core function of that learning community is to develop skills, to grow capacity, to foster collaboration and to strengthen the community as a whole to increase student learning (Tinzmann et al., 2009). Building on the procedural theory, developmental theorists (Doolittle, 1997) believe that we construct our own perspectives of the world through our own experiences. This is an active social process where meaning and learning is developed on the basis of experiences and with others (Learning Communities (LC), 2008). It is a social process of scaffolded learning (Marsick & Watkins, 1999). This is a perfect way to follow up the first level or procedural aspects of learning. Throughout the process of collaboration, the group has to determine a way to evaluate the success of the PLC in which they are involved. The evaluation is an important part of the whole process. This site-based learning, for the purpose of this study, has been classified as the second level of learning (Doolittle & Camp, 1999). When referring to Table 3.5. – Kelton’s Responses, it is evident
that teachers are involved in constructing their own knowledge. They also help others to construct knowledge.

There are advantages in having teachers as part of a PLC. One of those advantages is the fundamental belief that teacher learning will occur from participating in an educational PLC. The teachers will be able to see good practices at work and it will help to change their present understandings. Group work could push to the side the biggest roadblock to change, that of existing teacher beliefs on learning and teaching (Kruse, Seashore & Bryke, 1994). As part of the teacher learning process, there must be room for teachers to act on their own interests. Clay (1997) acknowledged that peer support was a foundational aspect of staff development. She built into the Reading Recovery framework (see Figure 3.5.) the time to question, challenge, discuss, explain, share and eventually work out issues that were roadblocks to learning. The rationale was to have teachers’ problem solve and build on their own theories of learning. This form of constructive learning may be classified as the second level of learning.

The Continuum

The Third Level of Learning

The third level of learning (Kemmis & Wilkinson, 1998), or advanced learning, is solely an individual endeavor. The teacher might have sought answers from others and now wants to investigate a personal interest or phenomenon of educational value. The question to ask oneself is “What do I now need to learn?” Teachers may turn to action research as a way of fulfilling the need for information on a particular subject of interest. Self-directed learning (Bruner, 1994) is a form of self-reflected knowledge acquisition by studying to understand and explain a phenomenon. The scope of their autonomy is in transforming their practice (McLaren & Giarelli, 1995). Clay (2005) strongly advocated for each teacher to challenge their present assumptions about reading and writing. The Reading Recovery staff development framework (see Figure 3.5.) expects that teachers fully participate within a
collegial network that is facilitated by a Teacher Leader/tutor. The purpose is to carry forward learning to be able to problem solve outside the confines of the group and to advocate for their own learning. This form of phenomenology learning (Livingston, 2011 May 8) is classified as the third level of learning.

If we are examining teacher learning based on its theoretical foundations, professional development should reflect the foundational views of these learning theories as well as knowledge acquisition through a learning process described by Marzano and Kendall (2007). We can see how the domains of learning, mental engagement and physical engagement transfer into current practices of offering professional development in the 21st Century.

Summarized, theories of knowledge acquisition, theories of learning and professional development, up to this point may be shown to tentatively complement each other. They may encompass a process for planning professional development. They could be considered the foundations of the learning process and would equate to the different levels of learning. A summary, Table 3.11 – *Foundations of Learning*, has been formulated to briefly describe the foundations of learning proposed by the works of Bloom (2009 August 19), Bullemer et al. (1989), Doolittle &Camp (1999), Bruner (1994) and Marzano and Kendall (2007). This is a tentative framework that may change or grow during the course of this research due to the development of a theoretical foundation in understanding a process of learning. It is meant to summarize a potential learning process for teachers. This might help to explain what has to be learned over time by the group of teachers participating in this study. It also offers an interpretation of a cycle of learning that is grounded in Blooms taxonomy (1956), Marzano and Kendall’s (2007) taxonomy, and the theories of how we learn through the actual physical engagement of that learning. The following Table, *Foundations of Learning*, represents the notion that learning may be looked upon as a continuum to build on knowledge, as skills/practice, theory and educational attitudes towards their own learning.
Table 3.11.

*Foundations of Learning*

<table>
<thead>
<tr>
<th>Theory</th>
<th>Teacher Learning Category</th>
<th>Professional Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedural</strong></td>
<td>Standardized</td>
<td>Stand alone</td>
</tr>
<tr>
<td></td>
<td>1st level of learning</td>
<td>One or more days</td>
</tr>
<tr>
<td></td>
<td>Theory, skills and attitudes</td>
<td></td>
</tr>
<tr>
<td><strong>Constructivism</strong></td>
<td>Intermediate</td>
<td>Site based</td>
</tr>
<tr>
<td></td>
<td>2nd level of learning</td>
<td>Ongoing professional learning community</td>
</tr>
<tr>
<td></td>
<td>Theory, skills and attitudes</td>
<td></td>
</tr>
<tr>
<td><strong>Phenomenological</strong></td>
<td>Advanced</td>
<td>Self-directed</td>
</tr>
<tr>
<td></td>
<td>Action Research/phenomenon</td>
<td>Ongoing- self directed</td>
</tr>
<tr>
<td></td>
<td>3rd level of learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theory, skills and attitudes</td>
<td></td>
</tr>
</tbody>
</table>

**Developing a Personal Subject Construct**

Up to this point, there has been an attempt to further clarify and put into perspective an understanding of a process of learning for teachers. The remaining review will attempt to focus more on knowledge acquisition for teachers and what they must learn within their own reality. *A Taxonomy of Teacher Engagement* (see Table 3.10.) explained by bringing into play the underlying theories of what, how and when we must learn. It was further explained that there were indications that learning was a transformative process that followed a path along a continuum. This study clarified that path as procedural learning, constructing learning or phenomenon learning. That path could also be referred to as level one, level two learning and level three learning. Theorists recognize that there is a continuum to learning based on the self-system, cognitive and metacognitive demands of the task (Bloom, 1957, Marzano & Kendall, 2007, Mesirow, 1991, & Pinnell & Woolsey, 1985). For a complete summary of Marzano and Kendall’s new taxonomy (2007) of learning, please refer to
Appendix M. A summary of Bloom’s original taxonomy (2009 August 19) is included for perusal in Appendix N.

No matter the level of learning deemed pertinent, Delors (1989) writes that we must consider four pillars of learning within the knowledge domain (Bloom, 1956) to be effective in carrying forward the learning. He strongly suggests that learning in the 21st Century is complex and the four learning pillars of knowledge must be studied and understood. This would help the individual to understand what must be done to acquire and develop the knowledge needed to further their personal understanding and practice. They may also be linked to the Reading Recovery teacher learning (see Figure 3.5.) presented in the works of Pinnell (1991). These four pillars of knowledge are learning to be, learning to live together, learning to do and learning to know. They could also serve as part of the knowledge base that Marzano and Kendall (2007) proposed in their taxonomy of learning. These four pillars of knowledge also include Bloom’s (1956) notion that skills and attitudes are important to the profession. Thus, the four pillars of knowledge, add to the learning domains, shown in Table 3.11. - *Foundations of Learning*, and would further explain what is considered knowledge.

**Table 3.12.**

*Four Pillars of Knowledge*

<table>
<thead>
<tr>
<th>Learning to be</th>
<th>Teachers have to act with greater autonomy, use judgment and assume personal responsibility.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning to live together</td>
<td>Teachers have to work as a community to promote student learning.</td>
</tr>
<tr>
<td>Learning to do</td>
<td>Teachers must learn their occupation. This includes skills, competence and putting it into practice. Learning to do calls for new types of skills.</td>
</tr>
<tr>
<td>Learning to know</td>
<td>Teachers must enrich their acquisition of knowledge by engaging in a never-ending process of learning.</td>
</tr>
</tbody>
</table>

Historically, at the school level, education systems tended to emphasize the “learning to do” which is basic/procedural or the first level of learning for teachers (Bullemere et al.,
1989), to the detriment of other types of learning. If you ask teachers, they are going to tell you that the important part of teaching is “learning how to do” which are also part of the standard learning or the first level of learning characterized in Table 3.11., *Foundations of Learning*. It can become intermediate learning if an understanding of the underlying theory is studied and shared with others. Teachers’ underlying belief is that learning how to teach the actual craft, is what is important (Fullan, 1993). They believe that by the act of teaching they are promoting the necessary skills for success in today’s society, while in reality they don’t have any idea of the theory underpinning the practice. Working with others helps to advance teachers’ knowledge to a second level of learning and it is necessary that teachers share and help each other. They could be classified as educational technicians (Adams & Tulaisiewiz, 1995) when in reality they must become practitioners whose reflected work guides that practice (Pohlm, 2000). Is it possible to have a system in place that facilitates and guides teachers to be better reflective practitioners? Part of the *Foundations of Learning*, tentatively presented in Table 3.11., and the *Four Pillars of Knowledge* presented in Table 3.12. is the notion that teachers have to build a personal subject construct of knowledge (Atherton, 2009) that enables them to move from the first level of learning to a third level of learning on an ongoing basis. This personal subject construct is the total of what the teacher knows at a particular time in their career. Building a personal subject construct of knowledge (Atherton, 2009) is critical to teaching in the 21st Century. Teachers who are undergoing some form of professional development must be guided to build on their personal subject construct. This construct can continue to grow and develop through the different levels of learning within their practice. The Reading Recovery teacher learner framework (see Figure 3.5.) ends with the teacher reconstructing their own theory. A personal subject construct must include the tentatively proposed *Foundations of Learning* in Table 3.11. and the *Four Pillars of Knowledge* set forth by Delors (1989) (see Table 3.12.) in the report of UNESCO on learning in the 21st Century. The three sections of the construct are
meant to also incorporate the knowledge domains (Bloom, 2009 August 19) of skills, theory and attitudes towards their own learning from the *Taxonomy of Teacher Engagement* (see Table 3.10).

Most likely the procedural form of professional development, or the first level, will fall short in building a complete construct of knowledge because of the focus on technical skills (Adams & Tulasiewiz, 1995). It could be viewed that this learning would be more along the lines of “learning to do”, as was postulated by Delors (1989) in the *Four Pillars of Knowledge* presented in Table 3.12. If the learning never went beyond this level, a teacher would most likely depend on a pre-packaged curriculum that didn’t allow for any individuality of material. The construct may be strengthened by involvement in the second level of learning. Becoming a member of a professional learning community could further help the teacher to develop that knowledge. To further strengthen the construct, the teacher may advance to a third category of learning and ask himself or herself, “What do I now need to learn?” (Mezirow and associates, 1990). The teacher could take on a personal project of educational study.

With the building of a personal subject construct, the educator is learning about theory, skills/practices and attitudes on self needs. Many teachers develop skills in one area but they don’t seem to build a cohesive, complete construct of understanding in their field. Education for some teachers becomes a simplification of a complex process (Clay, 2005). It would be a necessity for an educator to push to the third level of learning and perfect their construct of learning within their field to be considered a Teacher Leader or a leader in the field of education. Some would consider this to be characteristic of an exemplary teacher (Pressley & Roehrig, 2005). Exemplary in one’s profession may be defined as deserving imitation because of excellence (Merriam-Webster, 2010 August 15). At this stage, the subject construct of knowledge is comprised of all three levels of learning, the theory behind the learning, teacher learning and the *Four Pillars of Knowledge* (see Table 3.12.) to form a
subject construct (Atherton, 2009). Figure 3.6. –A – Teacher Personal Subject Construct, is a beginning representation of a teacher’s personal subject construct, which is based on the combined works of Bloom (2009 August 19), Delors (1989), Atherton (2009), Marzano & Kendall (2007), & Clay, 2005). This representation of the personal subject construct is tentative, and it is expected to expand as more information is gathered on the subject of teacher learning, teacher knowledge and professional development.

In referring back to Erica’s, Nora’s and Kelton's responses on the Likert Scale, we see that they have added to their personal subject construct. This is evident through their noted changes in knowledge represented by the change over time in their perceived learning. At this point, it would appear that they have followed a continuum that is grounded in a plethora of connected theoretical basis that explain the process of learning. Askew in Using an Unusual Lens (2009) advocates for being a constructive and active learner. A concept of transformative learning (Mesirow, 1991) might help to explain how we remain active and construct our own learning, is being explored. This is the beginning of forming an understanding that will be further developed and explored within the presentation and analysis of future data from the group of participating teachers.
In the field of education, pertinent knowledge for today’s cohort of students, is changing and evolving daily (Zhao, 2009). Some teachers feel that if they ignore the changes they will go away (Shulman and Shulman, 2004). With the advent of the technological age, we see information transfer at a speed never seen before (Fullan, 2001). A knowledge society has been born, and with its birth teachers must adjust their sails to the prevailing winds. Teachers are not alone on this journey, but everyone must learn to sail to the best of their abilities. Shulman (1999) set the field by posing three questions that developers of professional development and teachers determining their own learning must pose before planning any learning opportunity. These questions are:

- What is professional learning?
- How can teachers be helped to acquire and develop that knowledge?
- What do teachers need to know and do in their practice?

These questions posed by Shulman expand the notion of what constitutes a personal subject construct. An expanded construct will help to determine what teachers need to know and do in their practice so that they may drive forward their own learning. So, planners of professional development must first have a good understanding of what is to be learned. Then a process of knowledge acquisition will take place so that a transfer may happen to teachers’ practice. Atherton (2009 April 20) states that we must build on a personal subject construct within our own field (see Figure 3.6.-A). Further to building a construct Marzano and Kendall (2007) listed in their taxonomy of learning that knowledge in education may have three classifications of theory, skills/practice and attitudes. The analysis of the data presented on the second part of the self-assessment survey will hopefully help this researcher further develop a greater understanding on the development of a personal subject construct.

The second section of the self-assessment survey consists of a questionnaire. This is proposed to gather more information or evidence of learning which is used to better clarify the understandings developed from the first section of the self-assessment survey.
Change Over Time in Learning

Section 2 – Questionnaire

The second part of the survey (see Appendix C) asked the teachers to give their view of reading and writing theory, and how they taught reading and writing. The questions posed for the second section were to further gage the teachers understanding of theory, skills and attitudes in relation to literacy, and how they practiced teaching reading and writing. The results from the questionnaire were summarized and similar concepts were sought as a means to code the data (Merriam, 2009). This inquiry was focused on learning about theory, learning about practice and also learning about the professional self. Figure 3.6.-A – Teacher Personal Subject Construct, listed knowledge as practice/skills, self and theory. Learning about the professional self, is reported as percentages to show a personal level of understanding at that time. This percentage was realized by counting the number of times teachers mentioned that they had learned about their professional self. It was then determined how many times personal understanding of self was mentioned. This total was then divided by how many times individual teachers mentioned “self”. A simple mathematical procedure was used to find a percentage.

Table 3.13.

Term 1 –Personal Subject Construct – September 2008

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and writing everyday</td>
<td>Daily exposure</td>
<td>50%</td>
</tr>
<tr>
<td>Word solving/comprehension strategies</td>
<td>Directly taught</td>
<td>67%</td>
</tr>
<tr>
<td>Guided practice – repeated Strategy</td>
<td>Mini/lesson –whole group</td>
<td>78%</td>
</tr>
<tr>
<td>Modeling and doing</td>
<td>Meeting area</td>
<td></td>
</tr>
<tr>
<td>Reading and writing is a process</td>
<td>Sharing time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word list</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home reading program</td>
<td></td>
</tr>
</tbody>
</table>
In September 2008, at the beginning of Reading Recovery professional development, the teachers listed a limited ability to verbalize their thoughts on reading and writing. Much of what was mentioned was item based. Words such as strategy were mentioned but there was no elaboration of the term, so it was assumed that there would be a limited understanding of what it meant. Gratifying, under practice, was the fact that reading and writing were listed as everyday activities and that they must be taught directly. Essentially, it was difficult to gage an understanding of what was known by the responses that were recorded at this time. The respondents were vague, and it seemed like they were just putting down words they had heard. Within the column entitled “self” we see the percentage of three teachers who indicated that they could assess and verbalize their own learning needs. The teacher’s responses to the same question in June 2009 were a bit more elaborated and sophisticated. Again, their answers were summarized and coded using theory, practice/skills and self.

**Table 3.14.**

**June 2009 – Personal Subject Construct**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and writing are linked.</td>
<td>Reading and writing everyday</td>
<td>75%</td>
</tr>
<tr>
<td>Teach letters/sounds/words in context.</td>
<td>Sense of ownership</td>
<td>78%</td>
</tr>
<tr>
<td>Make meaning from the known.</td>
<td>Reading and writing genres</td>
<td>78.5%</td>
</tr>
<tr>
<td>Use structure.</td>
<td>Integrated across curriculum areas.</td>
<td></td>
</tr>
<tr>
<td>Use visual information.</td>
<td>Time to practice.</td>
<td></td>
</tr>
<tr>
<td>Daily.</td>
<td>Introduce new words/word lists/context.</td>
<td></td>
</tr>
<tr>
<td>Reading strategies.</td>
<td>Reading workshop.</td>
<td></td>
</tr>
<tr>
<td>Immersed in reading and writing.</td>
<td>Home reading program.</td>
<td></td>
</tr>
</tbody>
</table>

At this time, it was important to see that the teachers were now talking about strategic activity using the sources of information of meaning, structure and visual information. Their
understanding of how to integrate this within their practice had also shifted to including reading and writing within their daily teaching, whatever the topic. There was a definite shift over the year in understandings, as was evident in the increase in their ability to verbalize their own learning needs.

Early in December 2009, because of the vagueness of responses, the three teachers who took part in this study were interviewed (see Appendix K). It was important to follow up and question what and how they felt that they had improved in their overall knowledge about teaching reading and writing. In June 2009, this group was under tremendous stress to finish their yearly work with Reading Recovery and also with their other teaching assignment. The answers to the end of year self-assessment survey might have been rushed and not their best responses. Therefore, it was decided that a follow up interview was appropriate. The major interest was to understand how they felt that participating in Reading Recovery initial professional development had increased their knowledge about literacy practices, not only in Reading Recovery, but in their classroom practice.

Table 3.15. Follow-Up Interview- December 2009, (see Appendix K) represents the coded and summarized results again presented under theory, practice/skills and self for all participants as included in a personal subject construct. As before, the codes are determined by identifying key points, then grouping similar content. The difference here is that there is no quantitative data indicated for the professional self. It had been previously determined that there was a change over time in determining educational needs. It was deemed necessary to list similar experiences as written by teachers to give voice to their learning.
Table 3.15.

Follow up Interview – December 2009

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Professional self</th>
</tr>
</thead>
<tbody>
<tr>
<td>I now have a whole bank of literacy knowledge.</td>
<td>I have learned about assessment practices and analysis</td>
<td>The benefit of seeing and discussing teaching.</td>
</tr>
<tr>
<td>I didn’t know how kids learned to read and write.</td>
<td>Don’t take the comments personal, everyone learns at their own pace</td>
<td>I still find it hard to reflect on myself.</td>
</tr>
<tr>
<td>Knowledge is powerful.</td>
<td>It’s hard work to teach reading and writing.</td>
<td>Before Reading Recovery I was second-guessing my ability as a teacher.</td>
</tr>
<tr>
<td>Highly complex.</td>
<td>I focused on bits and not the whole</td>
<td>I was narrow in my views about reading and writing.</td>
</tr>
<tr>
<td>All my students didn’t get Reading Recovery but they got teaching that went along with it.</td>
<td></td>
<td>I now question things and search for answers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I bring meaning to the process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I now teach in Grade 4 and I went back to the basics. I had to teach from there. I learned that in Reading Recovery</td>
</tr>
</tbody>
</table>

We get the sense that the development of the teacher’s knowledge about their own learning was very important. The percentages shown on the Likert scale (see Appendix C) indicated the change in their perceptions towards their own teaching. But, the comments garnered from the interview, clearly show an increased awareness of self-analysis and reflection that was not evident in September 2008. The follow up interview elaborates by adding a voice to the noted change in their perceptions towards teaching over a year of professional development. The explanatory comments from the interview reinforced the original suppositions of the change over time in learning that had previously been reported as percentages in Table 3.1. – Erica-Self Report, Table 3.3. – Nora’s Responses and Table 3.5. – Kelton’s Responses. To add credibility to those results, we now must turn our sights to student results in reading and writing. We might gain a better insight into why there was a
change over time in teacher’s determination of personal educational needs. The following
table, Table 3.16. – *Summary – Average Growth in Reading Levels*, is a summary of the
average growth in reading levels by students over the period of professional development.
The data was collected from the Running Record (Observation Survey, 2005) listed on
Reading Recovery lesson records. It was decided that the time frame for the collection of
data would consist of three month blocks of time. This was equated to the concept of
transformative learning and the different terms of time. Therefore, term one, term two and
term three are used to indicate the passing of time. Records for each student were divided
into the blocks of time and progress, though reading levels were listed teacher by teacher.
The records indicate that there was a 25% increase in reading levels in term one, an increase
of 30% in term two and an increase of 44.4% in term three. Therefore, it is surmised that
teachers would analyze student data to determine their own needs by having an opportunity to
put their learning in practice (Cross, 1981, Lieb, 1991, & Marzano, 1991) and continuously
reconstruct their own understanding of literacy theory (Pinnell, 1991).

Table 3.16.

*Summary – Average Growth in Reading Levels*

<table>
<thead>
<tr>
<th>Term</th>
<th>Kelton</th>
<th>Erica</th>
<th>Nora</th>
<th>Total</th>
<th>Range</th>
<th>Average</th>
<th>% over term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.5</td>
<td>5</td>
<td>4</td>
<td>13.5/54</td>
<td>4 - 5</td>
<td>4.5</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>16/54</td>
<td>5 - 6</td>
<td>5.4</td>
<td>30%</td>
</tr>
<tr>
<td>3</td>
<td>6.6</td>
<td>9.5</td>
<td>8</td>
<td>24/54</td>
<td>3 - 9.5</td>
<td>8</td>
<td>44.4%</td>
</tr>
</tbody>
</table>

To further solidify the notion that when teachers analyze student data and this helps
them determine their own needs, we must look to evidence from data collected from another
source. The data from Reading Recovery lesson records – writing vocabulary, was collected
to show the change over time in learning new writing vocabulary. When Clay (Watson &
Askew (Eds.), 2009) conducted her research, she indicated that one issue of doing social
research within the field of education is that no group is static. There is continuous
movement of student’s, therefore, the periods of time are listed as first and second intake of
students. The first intake of children, were the children selected to participate first in the intervention. The second intakes were the students selected after the first intake had a participation rate of 12 to 20 weeks in the intervention. Each participant in this study was included by using their record of vocabulary gains during their period in Reading Recovery. The following table, Table 3.17. - *Change Over Time in Writing Vocabulary*, indicates the number of words on average the student learned over their period of time in Reading Recovery.

**Table 3.17.**

*Change Over Time in Writing Vocabulary*

<table>
<thead>
<tr>
<th></th>
<th>Nora</th>
<th>Erica</th>
<th>Kelton</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st} intake</td>
<td>25 3-30 range</td>
<td>21 2-26 range</td>
<td>19 5-23 range</td>
<td>22 2-30 range</td>
</tr>
<tr>
<td>2\textsuperscript{nd} intake</td>
<td>34 22-46 range</td>
<td>29 8-34 range</td>
<td>28 4-34 range</td>
<td>30 4-46 range</td>
</tr>
</tbody>
</table>

On average, the first intake had learned an average of 22 words over a period of their time in Reading Recovery. Some students began the intervention with two words, while some students ended the intervention with 30 words. The second intake of students had 30 words on average at the end of their time in Reading Recovery. Students entered with as little as four known words and some exited with 46 words. As teachers learned more about theory and self, it helped develop their understanding to better their practice (Pinnell, 1991).

The following comment by a teacher summed up the whole Reading Recovery professional development experience for this group of teachers:

“I wished I had picked up more”

Up to this point, we have seen an overlying emphasis that learning occurs over time, and the results add on to a personal subject construct. In the field of education, pertinent knowledge for today’s cohort of students is changing and evolving daily (Zhao, 2009). Some teachers feel that if they ignore the changes they will go away (Shulman and Shulman, 2004). With the advent of the technological age, we see information transfer at a speed never seen
before (Fullan, 2006). A knowledge society has been born, and with its birth, teachers must adjust their sails to the prevailing winds. Teachers are not alone on this journey, but everyone must learn to sail to the best of their abilities to build on a personal subject construct. Shulman and Shulman (2004) set the field by posing three questions in understanding the development of a personal subject construct. These questions are:

- What is professional learning?
- How can teachers be helped to acquire and develop knowledge?
- What do teachers need to know and do in their practice?

These questions posed by Shulman expand the notion of what constitutes building onto a personal subject construct. Presently, we all have a personal subject construct that consists of theory, practice/skills and self. Perhaps an expanded construct will help to explain what teachers need to know through professional learning so that they may drive forward their own learning. Planners of professional development should first have a good understanding of what is to be learned; then a process of professional development may be possible. Beyond the foundational work understanding teacher learning, it is also a necessity to understand how to bring that learning to an audience and be successful. Educational leaders must learn how to teach teachers that will facilitate a change in the personal subject construct. The journey within this study must now continue. We continue this journey by addressing and studying the executive function (Zelaso, 2005) of professional development to meet today’s educational needs. Readers might question the pairing of executive function and professional development. Executive function is normally thought of as a psychological phenomenon. It is defined as the actions performed on ourselves, which direct our actions to self-control our goal-directed behavior, and that result is the maximization of future outcomes. We may see that it is a perfect fit within the vocabulary of teacher professional development (Executive Function, 2009 February 19). This should be one of the goals for any professional development initiative (CPPD, 2009 April 17). Reading Recovery is built
on a theory that learning takes place through action (Pinnell, 1991). As teachers, executive function is important on many fronts, but especially in the evaluation of our own ideas, in reflecting on our own work, and most importantly, when we seek help when needed. The *Foundations of Learning* (see Table 3.11.) are evident when developing a personal subject construct, but in addition a professional must reflect on and critically evaluate his practice. As previously presented within the questionnaire and interview, the teachers’ analyzed student data to determine their own needs as well as their student’s needs. The following Table 3.18. – *Change Over Time in Self-determination of Needs*, indicate the change over time in self determination of needs.

**Table 3.18.**

*Change Over Time in Self-determination of Needs*

<table>
<thead>
<tr>
<th>September 2008</th>
<th>June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>75%</td>
</tr>
<tr>
<td>67%</td>
<td>78%</td>
</tr>
<tr>
<td>78%</td>
<td>78.5%</td>
</tr>
</tbody>
</table>

After determining their own needs, critical reflection might need to be added to the personal subject construct (see Figure 3.6.-A). This is an important consideration because knowledge is being built so that professionals can advance their own learning by self-determination of their needs. Teachers must hone this ability (Livingston, 2011 May 8), but planners of professional development must foster this important function for the continued growth of a personal subject construct of knowledge. This means that planners of professional development must expand their conversations about professional learning and the planning of that professional learning. A previous argument advocated for teachers understanding the basics of a learning process (see Table 3.11.). If teachers don’t understand how they learn, it is difficult to understand how children learn. Teachers analyzed student data to determine their own needs as well as their student’s needs. The overall goal is to help
teachers acquire pertinent knowledge to their practice. The following two components of executive function (Stanberry, 2007) are especially important to planners of professional development. These two are described as:

- **Working memory and recall** – We will learn if we can hold facts in mind while manipulating information and accessing other facts stored in long-term memory. Making meaning of the process is important and necessary. Our cognitive ability is organized in clusters and this facilitates how the brain processes information. It is a covert action (Stanberry, 2007) and may refer to the function of the brain explained in Figure 3.4. – Engaging the Brain.

- **Taking an issue apart** – We must practice analyzing the pieces of a problem or an issue, reconstructing and organizing it, proposing and studying new ideas, and taking part in complex problem-solving activities to find a solution. This can be group oriented or it can be an individual action. This is an overt (Stanberry, 2007) action that may be further explained as a function of the brain as depicted in Figure 3.4. – Engaging the Brain.

These two actions seem necessary or essential in order for professionals to develop the reflective skills needed to expand a personal subject construct of knowledge (see Figure 3.6.-A). Teacher executive function influences performance at school, or on the job, emotional responses, personal relationships and social skills. Yet, executive function plays itself out a little differently for each individual. It involves activating, orchestrating, monitoring, evaluating and adapting different strategies to accomplish different tasks (Zelano, 2005). It also requires the ability to analyze situations, plan and take action, focus and maintain attention and adjust actions as needed to get the job done. This could be better described by Cross (1981), Lieb (1991) and Mesirow (1991) in what teacher opportunities should encounter to construct, access and be involved in to learn. This is also exemplified with the inclusion of the Reading Recovery Teacher Learning Framework (see Figure 3.5.).
The foundational keys to transformative learning (Merriam & Caffarella, 1990) are experience and critical reflection. These two points help in the development of the critical thinking skills that form the “self” of the personal subject construct. The ability to analyze your own practice is necessary as you tap into the overt and covert behaviors of your learning (Stanberry, 2007). The two behaviors activate the ability to use our working memory in recalling how to deal with pertinent issues related to our teaching. So, critical thinking skills within the development of a personal subject construct (see Figure 3.5.) are deemed necessary in and out of Reading Recovery. It facilitates and promotes learning through our ability to analyze our responses to the stimuli presented and created while teaching. To further clarify this point, Table 3.19. – Promoting Learning-Executive Function, is presented to lay bare the processes of the executive function of learning. Professional development would naturally activate these processes to make learning possible for teachers. This table is derived from the works of Stanberry (2007) and Pinnell (1991), which describe the covert and overt behaviors that planners of professional development must facilitate to promote critical thinking, to re-construct a theory as part of building on a personal subject construct (see Figure 3.6.-A) of knowledge.
Table 3.19.

Promoting Learning – Executive Function

<table>
<thead>
<tr>
<th>Covert Behaviors</th>
<th>Overt Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mental Process – Cognitive Function</strong></td>
<td><strong>Executive Functions</strong></td>
</tr>
<tr>
<td>Activation</td>
<td>Organizing, prioritizing, and activating to work. Initiating, planning, strategizing and sequencing</td>
</tr>
<tr>
<td>Focus</td>
<td>Focusing, sustaining, and shifting attention to tasks</td>
</tr>
<tr>
<td>Effort</td>
<td>Regulating alertness, sustaining, and processing speed. Pacing, managing time, and resisting distraction</td>
</tr>
<tr>
<td>Emotion</td>
<td>Managing frustration and regulating emotions</td>
</tr>
<tr>
<td>Memory</td>
<td>Utilizing working memory and accessing recall. Using feedback</td>
</tr>
<tr>
<td>Action</td>
<td>Monitoring and self-regulation action. Inhibiting</td>
</tr>
</tbody>
</table>

Each mental process (see Table 3.19.), when we engage the brain, operates in rapidly shifting interactive dynamics to do a wide variety of daily tasks that require self-regulation by using attention and memory (see Figure 3.4.) to guide one’s action. It is evident that developing the ability to analyze our own needs in developing a personal subject construct is linked to our ability to think critically. This will lead to questioning of one’s own practice to determine our learning needs and the needs of others. Living in Nova Scotia, Canada, one cannot discuss professional development without considering the impact of the school accreditation process (NSDOE, 2005). The Reading Recovery group is not an isolated entity; they are also part of a larger learning process. This study involves three teachers participating in Reading Recovery professional development. It must not be forgotten that they are also part of a larger culture that includes their school environment being involved in a process of Accreditation (NSDOE, 2005). This group of teachers is learning on two fronts,
at the school and within the Reading Recovery group. The goal of Nova Scotia School Accreditation (NSDOE, 2005) is on school improvement at the grassroots level. It is essentially a four phase process where its main focus is on the student learning. This should drive teacher learning if they are critically evaluating their practice to self determine their learning needs. The accreditation process (NSDOE, 2005) was put in place to allow teachers to build on a personal subject construct (see Figure 3.6. -A) of knowledge that revolves around the executive function (Zelaso, 2005) which in its purest form is critical thinking.

The Reading Recovery professional development within an accreditation system will have a direct impact on practice, as it will help the development of knowledge and aid in the self determination of learning needs. This system allows for all three levels of learning depicted in Table 3.11. – *Foundations of Learning*. In this way, each school’s specific professional development needs, as mandated by their School Improvement Plan (TCRSB, 2005), the Tri-County Regional School Board’s Business Plan (2009-10), or individual needs governed by a professional growth plan. These three teachers have learned in an environment that includes Reading Recovery professional development embraced within the accreditation process (NSDOE, 2005) to meet student and teacher needs.

If critical thinking, explained as executive function (see Table 3.19.), is to be fostered within professional development, self determination of needs, practice/skills and theory of learning must be developed within the foundations of learning (see Table 3.11.). Professional development must reflect the needs of a changing society reflected by the diverse needs of teachers (Schmoker, 2006), and promote the acquisition of knowledge for both teachers and students. Teachers need to rethink their own practice and teach in ways they have never contemplated before. Student success depends on how teachers are able to learn the new skills/practice, new theory and determine their own needs, and then unlearn previous beliefs and practices (Fullan, 1993). This is where the accreditation process (2005) is a positive step towards including teachers in their own learning. The three Reading Recovery teachers are
adding to a personal subject construct that will see a ripple effect within their whole school.

The effective development of a Personal Subject Construct (see Figure 3.6.-A) relies on the involvement of the school community in school improvement initiatives. Fullan (2001) certainly advocates for community involvement by stating that “it is abundantly clear that one of the keys to successful change is the improvement of relationships – precisely the focus of group development. Table 3.11., *Foundations of Learning* describes working together to transfer a practice at the school level as the second level of learning. Clay in The Research Project (2009) realized early that teachers’ working together was an important process that allowed for a continuous refinement of knowledge to improve practice. In schools, a strong model of this is seen in the formation of Professional Learning Communities (PLC), (Kruse, Seashore and Bryk, 1994). The Personal Subject Construct (see Figure 3.6.–A), should now be expanded to include more than knowledge about theory, practice/skills and self determination of needs. These functions are, of course, central to the construct, but the construct has been expanding to include the executive function of professional development. The executive function of professional development has been discussed as critical thinking skills and must become an equal partner in the acquisition of new knowledge. Critical thinking is the thread that binds theory, practice/skills and self determination of needs together to make learning possible. Planning to help a teacher build on their personal subject construct of knowledge, as depicted in Figure 3.6. -A, has been expanded to include the executive function and now will be known as Personal Subject Construct – B.
Professional development, at its core, must be learner-centered (Marzano and Kendall, 2007) and with the inclusion of critical thinking it becomes teacher-centered. Learner-centered professional development includes not only the student but also, necessarily, the teacher. Professional development for teachers must be seen as on-going and focused (Fullan, 1998). A career-long perception of teacher learning is needed if we are to see quality time allocated to the cultivating of new teacher knowledge, new practices and change within a knowledge-based society (Davis, Sumara & Luce-Kapler, 2008). We must move beyond the industrialized-age mentality of assembly line production to an age where cerebral flexibility to problem-solve and think critically will be valued and compensated (Fullan, 1998).
Teacher Centered Continuing Professional Development

Reading Recovery

One of the central goals of the document Learning for Life 1 & 2 (NSDOE, 2002 & 2005) was that an early literacy intervention be put in place for students who were identified as being at risk of developing literacy difficulties. Reading Recovery (Reading Recovery Council of North America (RRCNA), 2009) was adopted as the early intervention of choice for Grade 1 students in Nova Scotia. The accountability of the intervention (RRCNA, 2009 May 28) was a motivational factor in making this choice. It was universally implemented throughout the educational system in Nova Scotia, by the provincial policy makers.

Reading Recovery’s (Clay, 2005) main function is to achieve two main goals:

1. The first goal is for the child to be a successful early reader and writer and for individual lessons to be discontinued.

2. The second goal is to identify children for further assessment, for longer-term assistance, and for specialist help in becoming an early reader and writer.

Reading Recovery teachers, through planned professional development, build a personal subject construct (see Figure 3.7.–B) of early literacy behaviors that enable them to put practices in place that enable individual students to close a gap of literacy achievement. There is a growing bank of research (DeFord et al. (Eds.) 1991, Schmitt, Askew, Fountas, Lyons & Pinnell, 2005, Watson & Askew (Eds.), 2005) that explains the ratings Reading Recovery receives as an excellent intervention that is effective in teaching young children, who are at-risk, to read and write. Teachers of Reading Recovery build a strong personal subject construct (see Figure 3.7.–B) in how to teach children to read and write. It is a system that focuses on student learning through sustained teacher professional development (CIRR Guide sheets, 2007). Teachers must become reflective practitioners who are focused on teaching reading and writing (Clay, 2005). Teachers enter Reading Recovery as students, not learning to read and write, but learning to teach reading and writing. The expectation for
teacher learning is high, both with theory and practice. They are supported by a Reading Recovery Teacher Leader. Fostering critical thinking, it would seem, is important throughout the process to achieve success. This is not to say that there are not detractors from the success of this intervention in teaching children to read and write. Farrall (2006), Elbaum, Vaughn, Moody (2000), Grossen and Coulter (1999) all have questions and critiques of Reading Recovery. Their major critiques are listed as:

- The teaching of reading and writing is missing certain key points.
- It lacks an independent research base.
- It discriminates against poor, minority students.
- It is not cost effective.
- It doesn’t reduce the need for Special Education.
- It does not raise the literacy rates nor do the children maintain their gains.

When Reading Recovery was first conceived in 1976, it was then rooted in 30 years of research, critique and advocacy (Watson & Askew (Eds.), 2009). Clay had already spent those years working with children who were becoming literate. This initial research challenged established assumptions about literacy behaviors and how children experiencing challenges in becoming literate should be taught. In publishing, *The Research Reports*, (Clay, 2009) she shared the research process with the world to shed transparency on the methodological framework of the development of Reading Recovery. Through the development of an interactive staff development model (Pinnell, 1991 & see Figure 3.5.) learning is applied to both children and teachers. The characteristics (Schmitt, et al, 2005-Chapter 8) of the Reading Recovery staff development model are:

- That it is inquiry-oriented.
- That construction of understandings is through observation, reflection and discussion.
- Using live case examples to discuss and build a base for making teaching decisions.
• That teachers challenge their own assumptions.

• That teachers challenge others assumptions.

• That while teachers are learning, students are learning, and this should show in the results.

Since the inception of Reading Recovery, there has been an abundant bank of research completed on the learning duality of the process. In *Using an Unusual Lens* (Watson & Askew (Eds.) 2009, pp.101-130) Askew writes about the research methodology and the multitude of ways of observing students to gage results. The unique methodology when undertaking research within the confines of Reading Recovery has led to some critiques of the intervention. In New Zealand, MacDowell (Watson & Askew (Eds.), 2009, pp. 133-161) states that Reading Recovery research is criticized on the basis of the organizational changes in schools, the behavioral changes in teachers and the predication on classroom instruction. This changing landscape makes it hard to study. Teaching in Reading Recovery is built on the notion that students and teachers behaviors will change over time. Clay (Watson & Askew (Eds.) 2009 pp. 35-100) stated early on that she used an unconventional research design that allowed for varying lengths of time and a school to school implementation to gather evidence of success. She acknowledged and built this into her design when conducting a study. This has created continuous issues for the research community, as it didn’t allow for a scientific methodology. In North America (Iverson and Tunmar, 1993), indicated that there was no random sample when they conducted their research and that their data was subjective. Swartz (Watson & Askew, (Eds.) 2009, pp. 162-189) also indicated that like in New Zealand, Reading Recovery in North America was difficult to explore with experimental studies. It would be difficult to maintain control groups with an unconventional research design (Clay, 2009). Shanahan and Barr (1995) indicated that they were under a misconception that only the students who make sustained gains were included in the data collected to track student progress, thus skewing the results. When put to the test, What
Works Clearinghouse (IES, 2009 May 15), a branch of the United States education system, indicated that five Reading Recovery scientifically based studies hold true. What Works Clearinghouse only reviews scientifically based studies. These studies replicate and extend the early research project of 1976. Of the multitude of studies on Reading Recovery, many were not included for perusal because they were not scientifically based. In the United Kingdom and Ireland, Burroughs-Lange (Watson & Askew (Eds.) 2009, pp. 190-217) indicates there were two issues at the forefront when discussing Reading Recovery. These two had to do with the public purse and readiness. The critiques were asking if the cost to individuals and society was showing enough of a return on investments in early literacy achievement. Supporting evidence has come from Brooks (2007) who reviewed and re-analyzed forty-eight different literacy intervention schemes. He argued that Reading Recovery showed through their national report in 2006-2007 that it delivered the outcomes promised in early literacy achievement. The London Evaluation study (Burroughs-Lange & Douetil, 2007) explored the issue of readiness. The children who had received Reading Recovery during the year were reported by their teachers as having made greater progress across a range of learning, not only in literacy. In 2007 (Hurry & Sylva) a follow up on an earlier study conducted in 1992-93, where they re-analyzed the results and represented the results in 2007. This study was important because it reiterated that children who took part in Reading Recovery at the age of six showed significant positive effects for children who were complete non-readers. Clay recognized that there were limitations to doing social science research in Reading Recovery. In the New Zealand national monitoring phase of 1976-1983 (Clay, 2009) she stated that issues with conducting research revolved around in house assessments by teachers, the unconventional design of grounded theory, and that teachers learning takes place through action. Learning for teachers and students does not remain static, therefore; it is difficult to study. All of this should not detract from continued learning about theory, practice and self built into a personal subject construct. Questioning should be
the act that leads to the development of an expansion of a personal theory or even future theories. There has been an expansion of understandings around the development of literate behavior since Clay first began to investigate and challenge assumptions about young children learning to read and write (Ballantyne, 2009). Clay’s goal was to always look for evidence that Reading Recovery was valuable to the system that had implemented the intervention. In Nova Scotia, since implementation, 20-25% of the Grade one population has bridged a gap in their literacy learning. We could expect that the professional development followed by teachers has helped in students and teachers learning.

If the executive function of professional development (Zelaso, 2005) is creating critical reflective practitioners, it is necessary that a solid foundation of professional development be built into the design of the professional development, moving teachers beyond technical expertise (Adams & Tulasiewiz, 1995) in presenting lessons. It is not enough to know what must be learned, it is imperative to know how it will be learned. A personal subject construct of knowledge in Reading Recovery is based on the generic construct initially presented in Figure 3.6.-A, and expanded in Figure 3.7.-B. The following construct of knowledge demonstrates what Reading Recovery teachers must learn to make them successful teachers of reading and writing. The construct has four (4) components which clarify the theoretical foundation (Clay, 1993) and procedures of Reading Recovery professional development (Clay, 2005). Together these four (4) components lay the foundation of knowledge and the path to learning that comprises the professional development necessary for Reading Recovery teachers.
The two (2) goals of Reading Recovery relate directly to student achievement, but it has long been evident that student and teacher achievement occur simultaneously. As Pressley and Roehrig (2005) aptly states, system reform, school reform, and program reform depend on teacher reform at heart. They observed that Reading Recovery trained teachers were considered exemplary primary teachers. Their research has shown that trained-in-Reading Recovery teachers were consistently in the exemplary group. It can be surmised that Reading Recovery professional development (see Figure 3.5.) is very effective in producing highly knowledgeable, exemplary elementary literacy teachers. The following discussion of learning through a process of professional development is intended to further explain the learning undertaken by the three (3) teachers participating in this study. There is no consensus on the best framework for continued professional development (Goals 2000), but it is agreed that a combination of approaches, ideas and techniques will help learning and
growth in one’s chosen profession. The one thing that is agreed upon is that it is crucial to ensure proficiency in certain basic processes (Cook & Rasmussen, 1994). These basic processes have been classified in the personal literacy construct (see Figure 3.8.-C) and this construct lays the foundation for learning about literacy. This literacy construct is further explained as:

- **Part 1 – Educational Theory –** Literacy theory learning involves teachers understanding how and why children use meaning, structure and visual information to self-monitor, search, crosscheck and self correct with the information in their environments. They must become strategic readers who can problem solve to become better readers and writers (Clay, 1993).

- **Part 2 – Educational Practice –** Teaching children to be strategic in their actions involves learning about Reading Recovery procedures (Clay, 2005), planning for individualized instruction, learning to observe children’s progress, knowing what to observe, learning to assess reading behaviors, analyze data, collaborate with peers, reflect on practice within a group and as an individual on a daily basis.

- **Part 3 – Educational Culture with a self determination of needs –** Teacher learning in Reading Recovery is fostered by being part of a professional learning community (Pinnell, 1991), all focused on the same goal of learning and teaching children to read and write. This is an integral part of self-determination of needs within a practice. Three levels that include Reading Recovery trainers, Teacher Leaders and teachers within that framework, support the overall professional learning community. The culture and practice is further strengthened by the implementation supports at the level of the school district. These supports include financing, time resources, technology and staffing needs at the school level.
• Part 4 – Further, ongoing strengthening of the literacy construct is necessary; in fact it is the thread that binds all parts together. This is the facility to reflect critically on one’s learning, thus pushing forward personal learning goals (Pinnell, 1991).

Logically, this chapter attempted to link learning of new knowledge to its theoretical foundations. The first section of the self-assessment tool gaged a general idea of teacher opinions embedded into present day theory and educational policy. The second section of the self-assessment tool was administered in an attempt to investigate the building of knowledge within professional development that is linked to the theoretical underpinnings (Marzano & Kendall, & Atherton, 2009 April 20) of continually developing a personal subject construct over time. The next chapter, Reaching a Destination, will continue to build on an understanding of transformative learning undertaken by the Reading Recovery professional development group.
Chapter Four

Reaching a Destination

Teachers participating in Reading Recovery professional development had changed their overall knowledge of literacy processes. This was supported by the evidence presented in Tables 3.13., 3.14., 3.15. and Table 3.18. – Change Over Time in Self-determination. This was a good beginning indication that they were transforming their learning from procedural to questioning a phenomenon within their practice. The time frame for professional development is divided into term one, two and three because of the underlying theory that belays the fact that learning is a process (Mezirow, 1991) that takes time. Table 4.1. – Learning Framework, is a summary of the learning framework that partially explains how learning is transformed over time. DeFord, Lyons and Pinnell (1991) while editing Bridges To Literacy indicated that there is a clear showing of a shift over time from only using skills to teach, to the development of orchestration abilities that helps teachers to problem solve issues around literacy acquisition. This chapter will continue with an investigation of the specifics of teacher learning, over a period of time. This is better explained within a learning framework (see Table 4.1.), which presents a specific timeline that could be followed when collecting and analyzing teacher data. This will attempt to show some specific changes in teacher learning. This learning framework is not meant to disparage or change the staff development process presented in the works of Clay (2005). This new professional development framework is meant to be used as an organizational tool that could explain the transformation of learning by a group of teachers learning to teach Reading Recovery. It is contrived from the theoretical foundation discussed in Chapter 3. The analysis and reporting of the data within this framework is to solidify the notion that learning transforms over time. Once the specifics of learning are evident, an attempt is made to further clarify the continued
process of professional development through its basis in theory. It begins with an attempt to link learning in Reading Recovery with general learning theory.

**Table 4.1.**

*Learning framework – Reading Recovery and Generic Framework*

<table>
<thead>
<tr>
<th>Learning Goal</th>
<th>Processing</th>
<th>Planning Reading Recovery PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized learning</td>
<td>Low order processing</td>
<td>Standardized professional development.</td>
</tr>
<tr>
<td>Structured environment</td>
<td>Directed P.D.</td>
<td>1 day in-service</td>
</tr>
<tr>
<td>Focus on knowledge</td>
<td>What do I need to learn?</td>
<td>Reading Recovery</td>
</tr>
<tr>
<td></td>
<td>What do students need to learn?</td>
<td>• Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Procedures</td>
</tr>
</tbody>
</table>

**Timeline: Term 1 – September to December**

Site-based learning
Focus on knowledge and practice.
Transformative learning

**Timeline: Term 2 – January to March**

Site-based learning
Focus on knowledge and practice.
Transformative learning

**Timeline: Term 3 – April to June**

Self-directed learning
Knowledge, application and evaluation
Transformative learning

With the development of this framework, it gives specific purpose to the professional development as well as to determine the necessary evidence to collect during this time of professional development. For anyone not familiar with initial Reading Recovery professional development, there are 18 sessions spanning an academic year. Each session is 2.5 hours in length and encompasses a focus, lessons study and discussion of theory and
teaching. The Reading Recovery Teacher Leader plans the sessions and facilitates the sessions. Throughout each proposed term, the Teacher Leader will visit the teachers to work one-on-one with the teacher. Over the span of the year, there are at least five visits to each teacher. Each teacher within this study was visited at least five (5) times during this period of professional development. Within this study, this is classified as lesson study (Brooks, M., 2009). A discussion takes place regarding the teaching and the theory based on the observations garnered from the teaching of a lesson. If the Reading Recovery staff model is based on the assumption (DeFord, Lyons, Pinnell (eds.), 1991) that language is a key factor in building theories around learning, then the ensuing discussions will enable the teachers to refine and extend their experiences over time. Essentially, there is a transforming of learning as explained in Table 4.1. – *Learning Framework*. Reading Recovery’s staff model is comprised of planning guidelines for the first four months of the intervention (CIRR, 2006) that situate teachers immediately in teaching children. This is described as necessitating the learner to build on the known while they construct new knowledge (DeFord, Lyons, Pinnell (Eds.) 1991). I have taken the liberty of using the frames of reference of the underlying theory of learning (see Table 3.1.) to categorize teacher data on learning. This enables a categorization of data within a period of time as described in Table 4.1., *Learning Framework*. This means that term one is characterized by procedural learning, term two is characterized by developmental learning and term three is characterized by individually studying a phenomenon.

How and what data to be collected was a daunting decision to make. Being a novice at taking the time to record detailed results, I found it to be a daunting task to decide how to critically analyze all the data collected from teachers and then reformulate it in a different way to show evidence of learning. To formalize the findings there had to be a way of organizing, analyzing and reporting the findings. It was important for me not get too caught up in the collecting of data. The teachers and their learning had to be the priority and I had to
be careful to not deviate in performing the duties of a Reading Recovery Teacher Leader. It was a balancing act throughout the year as I was part of these two groups.

**Data Collection and Analysis**

Part of the data collected was the everyday work performed by the Reading Recovery teachers. The only difference was that the data is collected, recorded, stored, and then formalized by an in-depth analysis within the professional development. The data is coded and reported in the appendices at the end of the document. All teachers, according to their self-analysis in chapter three, had built on to their personal construct of literacy (see Figure 3.8. - C). I felt that I did not have enough data so it was necessary to collect and analyze more data based on the focus of the professional development sessions. For this study all the data collected was referenced and organized by terms of time as listed in the learning framework (see Table 4.1.) to show the transformation of learning. The first set of data, which is strictly Reading Recovery records, consisted of conversations after sessions and visits, Teacher Leader comments and observations, teacher opinions from lesson record entries, student progress data and observation survey information and analysis (Clay, 2005). Reading Recovery professional development allows for the collection of student and teacher data because of the extensive tracking of both student and teacher progress. The second set of data collected consisted of their learning journal, and the lesson video analysis. This documentation is not usually collected during Reading Recovery professional development, but a formalized collection beyond discussing an issue was sought for this study. A third set of data was included because of Reading Recovery teachers fit within a school improvement process of accreditation (NSDOE, 2005). Since they were part of the accreditation process it was important to include some information that would include their views on standards of practice within a system. In September 2009, a professional development committee (Educational Professional Development Committee (EPDC) made recommendations that professional development offered as part of an accreditation process, should have standards
of practice. The EPDC advocated that the National Staff Development Council (NSDC, 2001) standards for professional practice have excellent potential as a guide for designing and implementing professional learning in Nova Scotia. Simpson and Montgomery (2007) have already written that Reading Recovery meets the context, process and content standards for quality professional development (2007). These standards reflect the context, process and the content that support professional learning within a system. Simply stated, these standards are explained as:

- **Context standard** – Knowledge about literacy theory. Articulates the intended results of professional development on practice.

- **Process standard** – Knowledge about the professional self. This is possible by the analysis of student data to determine own needs and then to determine student needs.

- **Content standard** – Knowledge about practice and skills. Demonstrates and articulates a deep understanding of literacy behavior.

It is evident when looking at these standards that they may be directly equated to Blooms (1956), Marzano’s and Kendall’s (2007) taxonomy of learning and they are linked to the personal subject construct (Atherton, 2009 April 20). These taxonomies are then transformed into a personal subject construct (Atherton, 2009 April 20). The taxonomies and construct includes learning about theory, practice/skills and self determination of needs in an educational setting. Therefore, the learning criterion listed by Bloom (1956) and Marzano and Kendall (2007), are now formalized and validated by creating a list of standards to guide in the acquisition or formation of these learning domains. So, for the purpose of this study, I felt that it was appropriate to ask teachers to complete an Innovation Configuration Map (2005) to gage their opinions of how well they were meeting the standards of good professional development within the confines of Reading Recovery professional development that was included within a system of Accreditation (NSDOE, 2005). The teachers’ answers are categorized under five headings from always, frequently, most times, sometimes and
never. Their answers are presented throughout this document to gage their opinions on their learning.

Using the types of data available, it is possible to triangulate the information under the headings of conversations, events and observations that took place during a year long period of professional development. This triangulation is critical in helping to determine construct validity, internal validity, external validity and the reliability in the evaluation of this study. The following Table 4.2., Analysis of Data- Framework, is an organizational structure that will make the organized collection of evidence possible within the timeframe of this study. It is linked to the timeline of data collection (see Table 4.1.) during the formation of the methodological framework.

Table 4.2.
Analysis of Data Framework

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Analysis</th>
<th>Session Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection</td>
<td>Triangulation</td>
<td>Sept 10 –11 – Administration of Observation Survey</td>
</tr>
<tr>
<td>Conversations – after visits, after sessions</td>
<td>Conversations</td>
<td>Sept 15th – Analysis of Observation Survey</td>
</tr>
<tr>
<td>Observations – Teacher Leader comments, teacher opinions, Teacher Leader observations, Predictions of progress, lesson records</td>
<td>Observations</td>
<td>Sept 30th – Moving into instruction</td>
</tr>
<tr>
<td>Events – journal, student data, and initial analysis of observations survey (2005), innovation configuration map</td>
<td>Events</td>
<td>Oct 7th – Observing Active problem solving</td>
</tr>
<tr>
<td></td>
<td>Coding of data:</td>
<td>Oct 21st – Exploring the processing change in Reading and Writing.</td>
</tr>
<tr>
<td></td>
<td>• Theory</td>
<td>Nov 4th – Teaching for Effective processing</td>
</tr>
<tr>
<td></td>
<td>• Practice</td>
<td>Nov 18th – Teaching for the constructive use of information – strategic</td>
</tr>
<tr>
<td></td>
<td>• Self</td>
<td></td>
</tr>
</tbody>
</table>
The conversations, observation and event documentation collected as data (see Table
2.3.) were coded into the three broad categories of theory, practice and self. The codes are linked to Bloom’s (2009 August 19) and Marzano and Kendall’s’ (2007) taxonomies of learning and then are built into the foundation of a Personal Subject Construct (Atherton, 2009 April 20). It is important to again note that this group of work is linked by the underlying theory of how it is postulated that learning takes place over a period of time. The reporting of results is divided into term one, term two and term three. This is a depiction of a timeframe built on the foundation that our learning is transformed over time (see Table 4.1.) and along the lines of the theoretical basis postulated. Term one is meant to span the time period of September 2008 to December 2008. The second term is meant to run from January 2009 to March 2009, while the third term begins in April 2009 and finishes in June 2009. The following analysis of learning is to show the passage of time while the teachers develop and transform their knowledge through professional development.

**TERM 1 – September to December 2008**

**Linking Conversations, Observations and Events**

**Showing change over time in learning**

Evaluation and assessment of student information used to inform teaching is a very important part of Reading Recovery. It is the evidence collected that enables the teacher to make decisions regarding the day-to-day teaching of children and to determine their own educational needs. The Observation Survey (Clay, 2002) is the tool utilized in the initial evaluation of children. It is a criterion-referenced tool that enables the teachers to group students according to needs (CIRR, Canadian Stanines, 2008) (see Appendix I). The Observation Survey consists of five tasks and the Running Record. The five tasks are letter identification, concepts about print, word task, written vocabulary and hearing and recording sounds in words. The Running Record is an observation tool to record reading behaviors so that teachers can base their teaching on current information. It is an assessment “for” learning (Davis, 2007). The teachers need to be able to analyze the results of the assessment...
to decide what they must teach their students. Since they were beginning Reading Recovery professional development, it was important to examine conversations, observation, and events data collected to see how:

1. Their knowledge about their professional self is perceived.
2. Their knowledge about literacy is perceived.
3. Their knowledge about practice is perceived.

**Knowledge about Professional Self – Process**

The analysis of student learning is an important and fundamental part of Reading Recovery (Pinnell, 1991). It is by assessing and analyzing that needs may be identified, and then a solution may be sought. Running records (2002) are administered to determine the reading level and also the ability of the student to orchestrate their own learning (Pinnell, 1991). The teacher must work with the student to build on their understandings. The lower the reading level, the more teaching that has to happen to scaffold learning and build on the known (Clay, 1998). Figure 4.1. – Running Record, shows us that the mean running record results for students within the first and second intake, indicates the known at that moment for these students.

**Figure 4.1. Running Record – On Entry to Reading Recovery – Reading Levels**
As perceived by the children’s reading levels, the children being taught in Reading Recovery have specific literacy needs on entry to the intervention. After spending at least a full year in school, they are experiencing some difficulty building on their reading and writing portfolio. It is necessary to explain the terms carry-over. Carry-over students did not have time to complete their series of lessons the year before and they continue on into the next academic year while they are in Grade 2.

All students entering Reading Recovery are perceived as being at risk of developing an achievement gap in literacy development. The Reading Recovery teacher must teach to bridge that literacy gap where the students will reach the average band of their classmates (Clay, 2005) by the end of their series of lessons. The teachers must be well versed in theory and teaching procedures to scaffold the changes in the literacy behavior sought. They must continue to assess “for” learning (Davies, 2007) on a daily basis. There were a few ways to gage the teacher opinions in regards to how they perceived their learning. The first was to examine their writing in their journal. As all qualitative data, the coding matrix (see Table 2.3.) was used to organize the themes of theory, practice and self. The difference here is that practice has two sub-categories listed as organization and procedures. Coding was complete and then to quantify the results, each mention of the code was counted to gain a percentage of the total score. In reading the teachers’ journals, (Appendix I) at this time, it was evident that the teachers were focused on the organization of the lessons. Their journals indicated that they had four (4) specific areas of concern. These were:

1. Organization of lessons.
2. Theory about being literate.
3. Their observations and what they meant.
4. Procedures of teaching children to read and write.
Table 4.3.

**Term 1 – Journal Entries**

<table>
<thead>
<tr>
<th></th>
<th>Organization</th>
<th>Theory</th>
<th>Observations</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kelton</strong></td>
<td>14%</td>
<td>38%</td>
<td>14%</td>
<td>34%</td>
</tr>
<tr>
<td>N=4/29</td>
<td>N=4/29</td>
<td>N=4/29</td>
<td>N=10/29</td>
<td></td>
</tr>
<tr>
<td><strong>Erica</strong></td>
<td>7%</td>
<td>19%</td>
<td>19%</td>
<td>56%</td>
</tr>
<tr>
<td>N=4/59</td>
<td>N=11/59</td>
<td>N=11/59</td>
<td>N=33/59</td>
<td></td>
</tr>
<tr>
<td><strong>Nora</strong></td>
<td>14%</td>
<td>33%</td>
<td>14%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Procedures were evidently tremendously important during the first term. The learning in this term was classified as basic or procedural according to the levels of learning (Bloom, 1956 & Pohlm, 2000). This includes lower level processing and would include specific, directed professional development. At this point the teacher’s concept of theory is item knowledge and the time necessary to complete all the records necessary to plan for accelerated learning. We also must be aware that organization and procedures may be classified together under one heading. Together they are part of a practice or involve knowing certain skills. Table 4.4., *Journal-Organization and Procedure*, is a summary of the percentages of times that practice was mentioned. The organization of their lessons and the Reading Recovery procedures are their major focus at all around 50% of their comments.

Table 4.4.

*Journal – Organization and Procedure, First Term*

<table>
<thead>
<tr>
<th>Names</th>
<th>Organization and Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelton</td>
<td>48%</td>
</tr>
<tr>
<td>Erica</td>
<td>63%</td>
</tr>
<tr>
<td>Nora</td>
<td>52%</td>
</tr>
</tbody>
</table>
Further to their comments about organization and procedures, they were really worried about not knowing what to do and discuss during their conversations. Their concerns about their fears of incompetence and lack of knowledge about literacy theory were voiced as questions of why the university didn’t offer “specialization” at the elementary level. Their comments (see Appendix H, K) were not a surprise because of their initial answers on the self-evaluation questionnaire that formed their initial personal subject construct (see Appendix D). They had written about “what” they were doing, but not “why” they were doing the activities.

During this time, it is very important to visit the teachers at their school setting. The Teacher Leader observed that they had many questions and mainly wanted to know “what” to do with their students. The teachers were visited at least twice, and they were mostly interested in procedures. At this time, the conversations were mostly about answering the teacher’s questions. The most frequent questions were: Is it right? What are the answers? How can we be putting out teachers who don’t know the basic concept of teaching reading and writing? The teachers wanted answers about what they should be doing next and had very little patience hearing that it is a process and you will understand. At this point they didn’t really want to understand in depth, they wanted procedures and reassurance that it was “what” they were supposed to be doing.

At the onset of Reading Recovery professional development, the teachers completed an Innovation Configuration map (Appendix F) of NSDC’s standards (2005) as it applied to their situation in Reading Recovery at their school. In Reading Recovery, analysis of student assessment is of primordial importance. Both formative and summative assessments (Davies, 2007) are important to inform teaching and learning. We look to student assessments to gage what we must learn to teach, then the ability to analyze the data is of utmost importance to their own learning. From their answer to outcome 4.1 (see Figure 4.2.) they indicated that
there were issues with them analyzing student data to determine what they had to learn to effectively teach at this time of the year.

**Figure 4.2. Analyzing Student Data – Term One**

**Innovation Configuration – Outcome 4.1**

![Graph showing analysis of student data](image)

Most teachers at this time were concerned with knowing “what” to do and not “what” it meant to them. Limited analysis of student and self-analysis of information was also evident from their answers to Outcome 7.4 (see Figure 4.3.). Using basic technology to help analyze their practice in the 21st Century is an essential part of them understanding their teaching decisions. There is a range of answers to the utilization of technology within their practice. This led this researcher to write that, at this time, teachers were depending on the Reading Recovery Teacher Leader to tell them what they should be doing within their practice and not using other means to analyze their own teaching.
It seemed that they were so engaged in procedural steps that higher order processing, or the executive function (see Table 3.19.) of professional development was not yet evident. They were also not using other resources available to them in developing higher order thinking, while depending on the Teacher Leader.

**Knowledge about Literacy Theory on Practice - Content**

At this time in their learning, the teachers seemed to be trying to simplify a theory by dividing it into items. This might be an after-effect of the pre-packaged programs that we see marketed in today’s educational world. It could also be explained as a way of making sense of what they are learning. We build meaning from our background knowledge and these teachers were indicating that they were not familiar with some of the theory on what is considered literate behavior. During the teacher visit, this was confirmed by the comments after the lesson. Such questions as “Problem solving, what does this mean?” “What is effective teaching?” and “How do I understand how children learn to read and write?” were common themes heard by the Teacher Leader. The focus was to expand their thinking about learning to read and write by commenting and building a discussion on and about strategic activity, observation and recording what they see of children’s behavior. Then they must decide what to teach. Each personal subject construct (see Figure 3.8.-C) was different. It
might be explained by the confusions shown with their answers on the Likert Scale of the self-assessment tool (see Appendix C) in Chapter 3. There had to be a balance between “telling” and leading them to “discover” an understanding of what they were seeing and hearing. They had to build on their understandings of literacy theory and it was different for everyone. The examination of their journal (see Appendix I) indicated that there was a shift taking place in their thinking by comments that indicated that a “mind shift in understandings” was taking place, but there are more comments on the frustration, how they are in survival mode. One teacher commented on the fact that the “whole process was trying her patience”.

During this time, the teachers had their first experience of completing the predictions of progress for the student (Clay, 2005). This is the educational plan for the student, long-term and short-term. It was encouraging to see that there was more of a focus on where they must journey with this child. It was still item based or procedural but that was expected, as this plan focuses on specific places the child would need intervening. The important part here is to know “what” must be taught, “why” it should be taught, and “how” it is to be taught. At this point the “what” and “how” are important and necessary. This was their focus and it is necessary. The children need to be engaged daily in the process and working with the teacher. The teacher is learning the “why” and hopefully will be able to eventually articulate the process of literacy learning that is beginning. The teacher’s low level processing should develop into higher level processing over the year. They are developing their personal construct of literacy (Atherton, 2009 April 20). The teachers were not focused on their own learning yet. They had to understand that all children can learn, and they have to understand theory about learning and teaching and then how to apply it. The children are challenging to teach but high expectations must be maintained to successfully close the achievement gap. Figure 4.4. – High Expectations, represents answers to Outcome 10.2 of
the Innovation Configuration map. It indicates that most teachers are not focused on high expectations for their students at this point in the professional development.

**Figure 4.4. High Expectations, Innovation Configuration – Outcome10.2**

![High Expectations, Innovation Configuration – Outcome10.2](image)

As of yet, teachers were not thinking along the lines of developing their skills in teaching. Normally, if you have high expectations for your students, you will also have to transfer those high expectations to yourself. It would seem that teachers are very self-centered at this point in time. If we are trying to express high expectations for students, it is important to bring the important players in educating a child on board. Fostering partnerships within the school and with parental figures is important in establishing and maintaining an understanding of high educational expectations. Developing partnerships must be fostered and considered an important skill in helping to communicate high expectations beyond the confines of the field of education. Figure 4.5. – Partnership, Innovation Configuration, Outcome 12.1 represents answers to their contact with families or community stakeholders to help build partnerships within their own educational community.
In the first term, learning “why” we teach the material is not considered a priority by teachers. This is a very self-centered individualistic part of the learning process. This process includes little self-analysis, little student data analysis, little involvement with families and higher expectations are not a focus for every teacher.

**Knowledge about Literacy Skills and Practices - Content**

It was interesting to investigate how learning was impacting views of literacy and how they saw it as improving their skills in teaching reading and writing. It was more about empowering them to take risks and not to make them dependent on the Teacher Leader as the “expert”. There is no expert, as knowledge continues to grow exponentially about how children learn to read and write. It is a scaffolding process so that teachers learn while in the process of teaching children. Comments in the observations (see Appendix H) made by the Teacher Leader indicated that the teachers were frustrated because I would not readily supply an answer. Clay’s (2005) states that literacy theory is continually evolving and our understandings change with that evolutionary process. The teachers’ comments led me to believe that they wanted concrete quick answers. They had issues with time limitations and commented in their journal on the fact that they never had enough time to plan, reflect, and write.
Towards the end of the first term there seemed to be a beginning shift in understandings. They were beginning to see how they could transfer their learning to the other part of their practice. This was confirmed by the comments in their journals. (see Appendix I). They talked about the assumptions they had when beginning Reading Recovery and how these assumptions about reading and writing were changing. Some of these assumptions listed were that “I was teaching from how I was taught”, I just “assumed they could read”, “Am I teaching grade 1 to read and write?”, and “I am thinking and questioning” about how I am teaching. One teacher commented in the opinions part of the self-evaluation survey (see Appendix D) she “didn’t give how to teach reading much thought”, and if the children couldn’t read, it “was the resource teacher’s problem”. This opinion was changing because the teachers were now realizing that it was their responsibility to teach all children to read and write. It was encouraging to see this assumption was changing as the term progressed.

Site-based learning (see Table 4.1.) involving a Professional Learning Community is considered the single most important way of teachers improving their practice. As previously discussed, with an Accreditation process (NSDOE, 2005) in place, working as part of a professional learning community is encouraged at the school level. These teachers are part of two professional learning communities. One is as part of the school culture and the other as part of Reading Recovery. Having completed the Innovation Configuration map the Outcomes 1.1 (see Figure 4.6.), 2.1 (see Figure 4.7.), and 2.3 (see Figure 4.8.) indicated that time spent on collaboration, leadership development and planning was necessary for these teachers to help in development of an ability to critically self-analyze (see Figure 4.2.) their own teaching. Hopefully, if more time and effort was spent on involvement in these three activities, self-analysis would improve over time.
Learning is socially mediated (Vygotsky, 2009 September 13). Collegiality is important to constructing an understanding of the theory supporting the practice.

Constructivism as a social activity is necessary to foster a school culture built on student success through teacher learning. Reading Recovery professional development focuses on teacher learning that will develop leadership skills of confidence in one’s ability to understand what is taught, how it should be taught, and finally understanding why it should be taught.

Historically, teaching is a profession that was very individualized. Working within a global knowledge society, this is no longer encouraged and efficient. This phenomenon could have
been encouraged by the belief that offering standardized professional development (see Table 4.1.) would bring about long lasting change in practice. It was a practical solution to a complex issue. This practice is changing as education becomes a global phenomenon that needs teachers to be open to change. The second level of learning recognizes that learning within a professional setting and being part of a group with the same goals will bring about lasting change. This Reading Recovery group needs to make changes in the area of leadership and planning if they wish to improve their practice. These teachers were still focused on the individual or themselves as when they began the Reading Recovery professional development. They had to begin the process of developing their persona as part of a learning team if they were going to benefit as much as possible from learning as part of a group.

Figure 4.8. Planning, Innovation Configuration – Outcome 2.3.

All participants of the Reading Recovery initial professional development were involved in some planning at the school level. The accreditation process (NSDOE, 2005) with a focus on professional learning communities makes this an important aspect of change at the school level. So, working as part of a group should not be a foreign concept, but for these teachers they seem to still be working mostly in isolation. Working as a group of educators, in Reading Recovery, is important because the teacher is helped by others to make teaching decisions to accelerate student progress (Pinnell, 1991). They construct each other’s
understandings. Collaboration within Reading Recovery is important on many levels, but none more than for the student’s literacy progress.

**Figure 4.9. Running Record – Carry Over Students**

Students carried over from the previous year were completing their series of lessons and those students were ready to move on after 20 weeks of instruction. All students made progress from their entry to their exit from Reading Recovery. Teachers are learning but at this time they were limited in being able to identify their learning priorities (see Figure 4.7.). The executive function of professional development (see Table 3.19.) is to have the skills of self-analysis necessary to determine what students must learn to be a better teacher and determine what they must learn as teachers. At this point, all indicators imply that teachers are not yet effectively identifying what they must learn to be more effective as literacy teachers of at risk students.
After the carry-over students exit the intervention, the Observation Survey (Clay, 2002) is again administered to identify another group of children who would benefit from Reading Recovery. The children entering Reading Recovery are reading between dictated text and level 3. As the teachers learn more about theory, practice and about their own learning needs we should see more of a transformation in learning. The data gleaned from conversations, events and observations during the first term of professional development, indicated that teachers are focused more on the procedural aspects of learning about their practice than on learning the underlying theory or even examining their own educational needs. The first term summary is presented as a way to observe the triangulated results from conversations, events and observations during the first term.
Table 4.5.


Conversations, events and observations

<table>
<thead>
<tr>
<th>Content</th>
<th>Procedural aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Limited data analysis to determine students needs and own needs</td>
</tr>
<tr>
<td>Context</td>
<td>Teacher Leader “telling” versus “revealing”</td>
</tr>
</tbody>
</table>

TERM 2 – January 2009 to March 2009

Linking Conversations, Observations and Events

Showing change over time in learning

The second term’s focus is to build teachers self-confidence and knowledge around how to observe students and vocalize what they see. They then must plan their teaching and support their decisions using the underlying literacy theory as their rationale. There has to be a shift from low-level processing to mid-level processing that is supported or scaffolded by the Reading Recovery group.

Table 4.6.

Term 2 – Reading Recovery Learning

<table>
<thead>
<tr>
<th>Developmental Theory</th>
<th>Learning</th>
<th>Processing</th>
<th>Planning P.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Site based leaning</td>
<td>Scaffolded processing</td>
<td>Site based professional development</td>
</tr>
<tr>
<td></td>
<td>Focus on knowledge and practice.</td>
<td>What do I now need to learn?</td>
<td>Accreditation – school based</td>
</tr>
<tr>
<td></td>
<td>Transformative learning</td>
<td></td>
<td>Reading Recovery Sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visits</td>
</tr>
</tbody>
</table>
Knowledge about Professional Self

Keep in mind that the executive function (see Table 3.19.) of professional development is the ability to self-analyze one’s own learning needs. This group of teachers is hopefully developing the skills to describe and analyze to make teaching decisions (DeFord et al, 1991). This helps to develop exemplary teachers who may develop professional expertise (Stringfield, Waxman & Padron, 2000). This process is, I have deemed, transformative learning (see Table 4.1.). It is categorized as putting in place the resources necessary for change over time in teachers’ personal subject construct (see Tables 3.13. & 3.14). It is important to see the building on the lower level processing of the first term and shift the teacher learning to more of an understanding of “why” teachers must push the boundaries of their learning. This process is built into the professional development model that has been validated in research studies as an important factor in the interventions success (Pinnell, Lyons, DeFord, Bryk & Seltzer, 1994). It includes a continuation of scaffolded practice in Reading Recovery while also being part of the accreditation process at the schools (NSDOE, 2005). If we wish to see greater collaboration (see Figure 4.6.) and leadership development, (see Figure 4.7.) it cannot only be encouraged in Reading Recovery.

Scaffolding the acquisition of theory and practice is a focus in Reading Recovery throughout the year, but a shift is necessary to move beyond simply acquiring item knowledge. There needs to be a move towards linking literacy theory with item knowledge to orchestrate the whole process. This will help differentiate instruction as needed by the student. According to the three categories of learning (see Table 4.1.), learning that is sustainable must include a group-focus, site-based and involve a professional learning community rationale. Reading Recovery as a group, would be considered a professional learning community with its focus on student learning through teacher proficiency. But it can’t stand alone! It is a sub-culture within the larger school culture focused on student achievement.
The second terms’ focus is on student and teacher data to show the change over time in learning literacy theory and seeing improvement in practices through involvement within Reading Recovery professional development. The resulting observations of teaching practices by the teachers and Teacher Leader developed and honed skills so they could see the theory transferred to practice. The three levels of expertise in the Reading Recovery staff development model help to scaffold learning (Stringfield et al., 2000). The teachers were now beginning to use their own observations to evaluate student evidence for teaching. The teachers had been in Reading Recovery for about four to five months and some shifts in their understandings were beginning to take place. They were beginning to look and see what the child could do, instead of what the child couldn’t do in reading and writing. In the first term, they were looking but they couldn’t see what they didn’t understand. So, understanding the theory was opening up a lens to their learning and acquisition of knowledge about literacy development. They were starting to use the terminology of literacy theory by the evidence of their comments in their journal (see Appendix I). Comments like “the students were using meaning and structure,” teachers commenting that they were “prompting” as a call to action, she “knows all basic concepts”, the students were “trying to use visual information”, the student was “predicting,” using “ all sources of information”, the students are “cross-checking” and “confirming,“, and “self-correcting,” and “problem-solving”. The teachers were also talking about “phrasing” and how the reading should sound. This is important because students who are phrased in fluent reading are orchestrating all sources of information in their reading to comprehend the story (Clay, 2005). They are living the adventure!

As part of studying the lessons, after group sessions and individual sessions, the teachers spoke about theory and practice, and how to connect the two. They talked, as a group, about analyzing reading to be able to make decisions about teaching, and about what they must learn about theory and practice. We talked about what the child had to accomplish
to be a good reader and how to connect this to the procedures they were asked to do. It is expected by now that the teachers would have a good grasp of the Reading Recovery procedures. They can now begin to focus on theory to be able to better individualize lessons. We also talked about assessment for learning (Clay, 2002) and how this determined what they must teach. This would also help them determine what they had to learn to be better teachers. They must become a constructive learner (Askew, 2009). This is very important, because the results of outcome 4.1 (see Figure 4.2.), of the innovation configuration map showed teachers were not proficient in the analysis of student information to plan instruction. Much of the learning was about the actual procedures of the practice of how to teach, but they were building a broader vocabulary and they were able to use it to describe their teaching decisions. This was included within their practice by their comments (see Appendices D, G, I & J) on building “a reading and writing vocabulary”, “how to teach the child to search, monitor and solve on their own”, “the importance of observations and knowing what to observe”, and to continue to build on the continuum of the “known”. They were now starting to find what the student knew and build from there. If the teachers could gage what the student knew, they could also determine what they must learn as part of the process. Again, as they were working on building the continuum of the known with their students, I was working on building this same concept with the teachers. During Reading Recovery field trials in 1978-79 (Clay, 2009), consultation and not prescription was important to developing teacher expertise.

In their journals (see Appendix I) the teachers continued to write about their concerns about the theory, how hard it was to observe students’ progress and to know where to go from there, in transferring knowledge to their Reading Recovery lessons or practice. There was a shift away from the organizational aspect of Reading Recovery. The discussion was more about the theory and understanding the practice. But then again, individual differences in
teacher’s understandings must be valued and built upon to see a change over time in instructional practices.

Table 4.7.

*Comments – Journal- Theory, Practice and Self*

<table>
<thead>
<tr>
<th>Organization</th>
<th>Kelton</th>
<th>Erica</th>
<th>Nora</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=5/27</td>
<td>18.5%</td>
<td>n/a</td>
<td>9%</td>
</tr>
<tr>
<td>N=1/11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td>22%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>N=6/27</td>
<td>20/55</td>
<td></td>
<td>2/11</td>
</tr>
<tr>
<td>Observation</td>
<td>22%</td>
<td>18%</td>
<td>27%</td>
</tr>
<tr>
<td>N=6/27</td>
<td>10/55</td>
<td></td>
<td>3/11</td>
</tr>
<tr>
<td>Procedures</td>
<td>37%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>N=10/27</td>
<td>25/55</td>
<td></td>
<td>5/11</td>
</tr>
</tbody>
</table>

The comments from their journal, in the second term, were transcribed and coded by using the coding matrix (see Table 4.8.). As in the first term, organization and procedures may be considered as part of practice and skills based. When organization and procedures are compared across the first and second term, we still see a good concentration of time spent on talking about practice and skills.

Table 4.8.

*Comments – Journal – Practice*

<table>
<thead>
<tr>
<th>Organization</th>
<th>Organization</th>
<th>Procedures</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 1</td>
</tr>
<tr>
<td>Kelton</td>
<td>14%</td>
<td>18%</td>
<td>34%</td>
</tr>
<tr>
<td>Erica</td>
<td>7%</td>
<td>None</td>
<td>56%</td>
</tr>
<tr>
<td>Nora</td>
<td>14%</td>
<td>9%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Except for Kelton, the organizational aspect of the lessons was decreasing while a focus still remains on procedural aspects of the lesson. Procedures will probably remain a
focus throughout the year because teachers are trying to find ways to individualize lessons and they will focus on procedures. Clay (2009), when she was considering implementing Reading Recovery internationally, said that teaching includes the integration and verbalization of complex behaviors. She also stated that asking teachers to learn and verbalize was theoretically frustrating for many people. Evidently, theoretical understandings develop over time with practice in teaching and peer support. During this period, the carried-over students had finished their series of lessons in Reading Recovery and now the Grade 1 students who had commenced their series of lessons in September were coming to the end of their series of lessons. The teachers were going to be choosing other students for the intervention and it was time for them to analyze their own learning according to students initial and end reading levels.

**Figure 4.11. Running Records – Entry and Exit**

![Graph](attachment:image)

These reading levels were obtained through an administration of the Running Record task as part of the Observation Survey (Clay, 2002). Figure 4.11. – Running Record-Entry and Exit, shows the students’ progress during their time in Reading Recovery. Teachers were learning with their students, just on a different level of understanding. These students had begun the year with the teachers and they were now readers, compared to when they started the intervention. In their journals (see Appendix I), teachers felt that they had learned more
about observation and theory. An attempt was made to draw the teachers away from having a sole focus on the procedural aspects of the lessons; to a move towards analysis of the decisions that they were making within the lessons. The number of comments revolving around the procedures still permeates their thinking about teaching. Novel learning that includes teaching procedures must also include time to question, challenge, discuss, work-out, explain and share with a group the decisions that were made (Clay, 2009). Change does take time!

**Knowledge about Theory on Practice**

Students who are beginning their series of lessons are expected to have short-term and long-term plans while in Reading Recovery (Clay, 2005). Teachers have the responsibility of setting learning goals for their students. It was possible to note their predictions (Appendix J) for their students. It was evident that their language was changing regarding their understanding of theory linked to the practice of teaching. They were now talking about teaching the child to problem-solve using meaning, structure and visual information. They wanted the child to monitor at the point of error and to self-correct that error. Their use of language was changing which indicated that they were beginning to understand strategic activity in reading and writing. Their comments were less about specific items and more about connecting all the pieces together through reading and writing. The teachers were starting to do this with their students and they were doing this with their evolving learning about reading and writing. Knowing what they had to teach indicated to them what they had to learn. They were now talking about fostering independence in reading and writing. While they were talking about the child gaining some independence from them, I was working on teaching them to have more independence in their own problem-solving at difficult situations. They had to start making some decisions on their own regarding teaching and being confident of those decisions. They had to evaluate student evidence to see what they must learn to improve their practice.
The teacher conversations after lesson study started to take on a whole different meaning. They talked about accelerated learning, building the foundations of a self-extending system, making good teaching decisions, prompting as a way to call the child to take an action, learning to use precise language and how they were enabling the child to problem-solve. They started to use language that describes literate behavior and their understandings were building. At times they were still focused on item knowledge like “reading the words”, but it was changing and they were working towards understanding the reciprocal nature of reading and writing.

The writing in their journals (see Appendix I) was starting to shift to a more complex language and understanding of the underlying theory. Comments were being made that they had to focus more on strategic activity, that reading and writing was not a passive process, they had to teach to build the networks in the brain, and that teaching at times had to be specific and focused. It was gratifying to see some questions being asked about their own teaching. “Am I effective?”, “Can I make this better?”, “What have I learned today?” “What have I taught today?”, “What will I teach tomorrow?” These questions are all necessary to advance learning in a positive direction. If we compare the mention of theory in the first and second terms, we see Erica having made significant shifts in her writings about the theoretical underpinning. It was perplexing to note that there was a decrease in Kelton’s, and Nora’s writing about theory.

Table 4.9.

<table>
<thead>
<tr>
<th></th>
<th>Term 1</th>
<th>Term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelton</td>
<td>38%</td>
<td>22%</td>
</tr>
<tr>
<td>Erica</td>
<td>19%</td>
<td>36%</td>
</tr>
<tr>
<td>Nora</td>
<td>33%</td>
<td>18%</td>
</tr>
</tbody>
</table>
The comments in their journal regarding theory were better versed but there were less of them. This was a surprise, as the comments were more sophisticated and it was expected that there would be a greater focus on learning about literacy theory. Upon further investigation, it was noted that the comments surrounding observations had increased or remained relatively elevated. In the second term, there were many more comments about their observations than were noted in the first term. Askew (2009) in Using an Unusual Lens noted that the staff development model is grounded in observation of children as they were becoming literate while they develop a theory of literacy processing.

**Table 4.10.**

*Journal – Comments on Observations*

<table>
<thead>
<tr>
<th></th>
<th>Term 1</th>
<th>Term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelton</td>
<td>14%</td>
<td>22%</td>
</tr>
<tr>
<td>Erica</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>Nora</td>
<td>14%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Their efficacy in observing and noting those observations had increased and this can only be achieved through a better understanding of the underlying literacy theory. They are building on a theory grounded in their data collection of children learning. Observation leads to theory building (Schmitt, Askew, Fountas, Lyons & Pinnell, 2005, pp. 93-101) because they become more articulate about children’s behaviors and what they might mean to their teaching. So, through better understanding of theory, these teachers are able to observe and qualify their evidence to make better teaching decisions.

**Knowledge about Literacy Behaviors and Skills/practice**

Conversations at this time were beginning to be more about transference of their learning in Reading Recovery to their practice in and out of Reading Recovery. This was essential for the child but asking teachers to apply what they were learning to their own teaching was of primordial importance. It was never suggested to the teachers that the
Reading Recovery procedures were appropriate for use in their classroom as a whole. Clay (2009) emphatically states that the teaching procedures are not recommended for the majority of children. What can be argued is that the learning about how to teach children to read and write will empower teachers to effect change in their overall practice (Lange & Burroughs-Lange, 1994). The comments in their journals (see Appendix I) made regarding this were, “increasing their understanding of how young children learn”, “not only about reading and writing, but learning in general.” They were also questioning how they were learning and how they were applying this learning. They were asking themselves: “What have I learned about the process of young children learning to read and write?” and “What have I learned about myself as a teacher?” They were beginning to ask themselves some very hard questions. They needed to be led to answer those questions. It was important for them to ask themselves “What have I learned?”, ”What have I taught?”, and what do I now need to learn?” These questions could be classified as teacher prompts that call them to take some action. Subsequently, increasing their knowledge base in literacy would ultimately add to their personal subject construct (Atherton, 2009 April 20).

In their journal (see Appendix I) they also wrote about the professional development. Their comments were varied, but the most frequent were that “There is no better professional development than talking with peers, watching others teach and answers to your questions”, I am also “finding ways to improve my resource program”, that “building trust is important to the process of internalizing information”. With this information, they described that they were “growing as a teacher” and they “abandoned procedures that were counterproductive”. They were so happy that it was “student and teacher centered”. The professional development is inquiry-oriented where teachers construct their understanding via observations, reflection and discussion using live case examples where they build a base for teacher decision making (Schmitt et all, 2005, pp.121-160).
This learning couldn’t be summed up any better than the following teacher’s comments: “I know I would not be teaching reading the way I do, nor would I know how to observe children in the way I do, I am so grateful that I have had this opportunity.”

In offering a short summary of the second term, it could be surmised that teachers had developed and changed in the use of their language in describing student’s progress and in the ability to describe their own learning. Listed in their observations, they were noticing students’ behaviors and were able to better explain their teaching decisions because of a better understanding of how children learn to read and write. When Clay (2009) was writing about implementing Reading Recovery internationally, she wanted it understood that change during the year of professional development was a unit of learning in itself. It is a process of uncovering hidden assumptions within their collegial network.

Table 4.11.

Term 2 – Summary – Content, Process and Context

<table>
<thead>
<tr>
<th>Content</th>
<th>Change in the complexity of language used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Analysis of evidence = observation = decisions</td>
</tr>
<tr>
<td>Context</td>
<td>Change in the complexity of language used</td>
</tr>
</tbody>
</table>

TERM 3 – April 2009 to June 2009

Linking Conversations, Observations and Events

Showing change over time in learning

Within the third term, teachers are directed towards more self-directed inquiry. They now have had optimal time to observe reading and writing behaviors that inform their intuitive understandings of cognitive processes (Schmitt et all, 2005). I assumed that their teaching should reflect their growing understandings. They are expected to have a bank of knowledge regarding literate behavior and apply the knowledge to their practice. Self-evaluation of learning is a focus within this term where they now have some ability to
interpret and transfer that learning to their own teaching (Shannon, 1990). The third term is characterized by the teachers having and continuing to develop the ability to evaluate, describe and then explain the results of their teaching. They have to continue on the journey of transformative learning to be an informed effective Reading Recovery teacher.

Table 4.12.

**Term 3 – Plan for Learning**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Learning</th>
<th>Processing</th>
<th>Planning P.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenomenology</td>
<td>Self-directed learning</td>
<td>Higher Order processing – metacognition</td>
<td>Self-Directed professional</td>
</tr>
<tr>
<td></td>
<td>Knowledge, application and</td>
<td>What have I learned?</td>
<td>development</td>
</tr>
<tr>
<td></td>
<td>evaluation</td>
<td></td>
<td>Professional Growth Plans</td>
</tr>
<tr>
<td></td>
<td>Transformative learning</td>
<td></td>
<td>Reading Recovery Sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visits</td>
</tr>
</tbody>
</table>

**Knowledge about the Professional Self**

While nearing the last months of Reading Recovery professional development, the teachers’ comments from their journal (see Appendix I), their written observations, student progress and Teacher Leader comments were organized and coded using the coding matrix (see Table 2.3.). Teachers had been well underway in their teaching and building of understandings around literate behavior. The most written in this section is about “reflection”, “better analysis” the “running record”, and “don’t assume” that the student knows more or less than they do. There is a continuous mention of the notion of item versus whole, as we had many discussions regarding the need to bring meaning to the teaching for the student. Not dividing the teaching into little bits of information is essential to bring meaning to students learning to read and write. It is important as a teacher to remind oneself that if we divide a complex theory (Clay, 2001) into its smaller parts, the students will do that also. The understandings must begin to consolidate so that teaching is solidified, leading to
the teachers commenting on the whole versus the parts of lessons, and the theory. All teachers’ comments were now more focused on discussing and questioning the theoretical foundations underpinning Reading Recovery.

Table 4.13.

Term 3 – Journal

<table>
<thead>
<tr>
<th></th>
<th>Kelton</th>
<th>Erica</th>
<th>Nora</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>n/a</td>
<td>13%</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N=2/15</td>
<td></td>
</tr>
<tr>
<td><strong>Theory</strong></td>
<td>75%</td>
<td>47%</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>N=15/20</td>
<td>N=7/15</td>
<td>N=13/18</td>
</tr>
<tr>
<td><strong>Observation</strong></td>
<td>16%</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>N=2/20</td>
<td>N=3/15</td>
<td>N=1/18</td>
</tr>
<tr>
<td><strong>Procedure</strong></td>
<td>15%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>N=3/20</td>
<td>N=3/15</td>
<td>N=4/18</td>
</tr>
</tbody>
</table>

During my observations, there seemed to be an attempt on the teachers’ parts to convey the notion that they had to analyze their own teaching and learning. They should know what they must learn. This meant that student assessments were important for informing practice but it then should lead to self-assessment. Through the coding of their comments in their learning journal (see Appendix I), it is apparent that over the year there was a change over time in the number of times the teachers discussed the theory. They needed to take risks in their teaching, and then to analyze where it had led them in their journey of understanding their own practice. To gather more information on fostering teacher abilities to interpret and verbalize their learning they were encouraged to video lessons. The Reading Recovery staff development model does not require video analysis of lessons. Since the principles of Reading Recovery professional development (Pinnell, 1991) are to develop the skills to describe, analyze and make inferences while teaching, it was felt appropriate to use video analysis as evidence of learning for this purpose. Therefore, the teachers were
asked to instill in their practice the notion of videotaping their lessons. This could become a habit and promote individual lesson study. This was the perfect time for them to be able to self-assess and view their own practice. They did videotape (see Appendix L) three lessons during the last months of professional development. The comments listed are for the analysis that they did on their own teaching. In their analysis they commented on: “I don’t know if I was teaching”, “Experience in teaching is important”, “Continue to reinforce the taught”, “Not using the terminology”, “I am doing all the work”, “I have to bring it together”, “I guess I didn’t realize that he was at a loss for meaning”, “He is trying to remember”, “I am monitoring for him”, and “I made assumptions”. The most notable change is that all teachers were now commenting on theory to rationalize practice. This is reinforced by the change over time listed in Table 3.13. – Personal Subject Construct-September 2008 and Table 3.14 – June 2009-Personal Subject Construct.

They were also talking about the principle of phrasing and fluency, teaching so that they use the three sources of information, going from the known to the unknown. They were talking more about strategic activity, problem solving, having a change in thinking and remembering that the brain and emotions influence the student’s progress. There was still evidence that when they were struggling to understand, they reverted back to teaching for items and not reciprocity. There were significant changes over the period of professional development towards procedural aspects of the lessons. They were able to verbalize the areas they now had to work on within their personal subject construct. This was very encouraging because they were beginning to self-analyze and not depend on me for “tolds”. They were beginning to take responsibility for their learning but as is evident in Figure 4.2. – Analyzing Student Data, there needs to be a continuation of an emphasis on observation to improve practice.

They seemed to understand the two goals of Reading Recovery. The first is the notion of diagnostic teaching. They realized that they were closing the literacy gap with all
the children they worked with during the year. Discontinuing their series of lessons was important but overall learning was more important. Student data, such as reading levels, indicated that children were learning and the teaching was helping to close the literacy gap. Running Records of reading were used to gauge the progress in reading and in turn indicate teaching is the cause. The outcome of effective staff development must be the growth of a set of theoretical understandings that enable the teacher to make decisions and then take action (Pinnell, 1991). Their understanding of theory had changed considerably over the span of an academic year.

Table 4.14.

*Development of Theory over Time*

<table>
<thead>
<tr>
<th></th>
<th>First Term</th>
<th>Second Term</th>
<th>Third Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelton</td>
<td>38%</td>
<td>22%</td>
<td>75%</td>
</tr>
<tr>
<td>Erica</td>
<td>19%</td>
<td>36%</td>
<td>47%</td>
</tr>
<tr>
<td>Nora</td>
<td>33%</td>
<td>18%</td>
<td>72%</td>
</tr>
</tbody>
</table>

On entry to Reading Recovery in February, the range of reading levels for the students was from dictated text to Level 6. It is evident that teachers are building their knowledge about theory and practice and then applying it to their practice. A great deal of time was spent on building the skills that would foster the ability to analyze their own teaching decisions based on the evidence. The mediums used were lesson study (Brooks, M., 2009) to learn and use diagnostic techniques that develop the skills to describe, analyze and in the end make inferences to teach (Pinnell, 1991).
Evidently, as shown in Figure 4.12 – Running Record-Entry - Exit, reading levels changed over the year. During the year, the range of entry reading levels were similar, but as the year was ending, their exit results had increased exponentially. This could indicate that as teachers’ knowledge increased, so did the literacy behavior of students.

Table 4.15.

Student Reading Levels – Change over Time

<table>
<thead>
<tr>
<th>Carry over students</th>
<th>First students</th>
<th>Second students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry 0 – 6</td>
<td>Exit 6 – 12</td>
<td>Entry 0 – 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit 4 – 18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Entry 0 – 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit 10 – 18</td>
</tr>
</tbody>
</table>

I decided that self-analysis of teaching decisions was so important, that teachers were asked to carry-out a simple case study (see Appendix G). The Reading Recovery staff development model (Pinnell, 1991) does not include completing a case study. This was administered to garner more information regarding the self-analysis ability of teachers. One of their students was chosen and followed for four weeks. Teachers were asked to analyze their teaching using their lesson records. It was evident that there has been some progress in this domain but there is still much work to be done. Teachers had to effectively analyze
evidence of student learning to determine their own learning needs. Progress had been made in self-analysis, and the use of vocabulary such as “strategic activity” and “orchestration” that is indicative of higher order processing by the teacher. This would be classified as the third and most advanced level of learning (see Table 3.11). This process is self-directed and it takes self-discipline and time. Over this period, awareness built that teachers are smart and they do build a vocabulary, but that vocabulary might be catch phrases that a Teacher Leader expects to hear. It seemed that they could use the vocabulary as a whole range of catch phrases but it might mask the fact that there are no deeper understandings of the actual theory. They could verbalize the vocabulary but did they really understand? I commented that there “was not enough teaching for reciprocity in reading and writing”. They were treating the process of reading and writing as two complete, separate entities. In turn, this was an indication of what I had to teach.

There was evidence that a change in the teachers’ ability to self-analyze was developing. This was evident from their response to Outcome 4.1 (see Figure 4.13) of the innovation configuration map. If we compare the first term with the third term, there has been some movement, but it is limited.

**Figure 4.13. Analysis of Data, Innovation Configuration – Outcome 4.1**
Also reported in the first term, the use of technology was not a strong point for this group. They touched on many sites that were important to Reading Recovery, but technological competence was not a focus within the professional development. Although it was not a focus, there has been some movement on the teachers trying out new sites for obtaining information on learning and teaching.

Figure 4.14. Technology- Innovation Configuration – May 2009 – Outcome 7.4

These teachers had made progress in self-analyzing but it was determined that this behavior would still need scaffolding to happen. Reading Recovery has a support system (Clay, 2009) that includes three concentric circles to continue to support teacher learning beyond the initial year of Reading Recovery professional development. Training also continues after the initial year with a built in renewal system to update them on new ways to be effective in their work with children (Schmidt et al., 2005).

Knowledge about Theory on Practice - Context

In my observations, I noted that the group was starting to be more comfortable with verbalizing the literacy processes. They had to be prompted, but they could verbalize the process. These conversations centered more on strategic activity, orchestration, independence and looking for evidence of what had been taught. As we ask students questions to prompt problem-solving, the same was asked of them. These questions are:
“What did I teach today?”

“What am I going to teach tomorrow?”

“What now must I learn?”

They were talking more about assessment to guide their practice and extending their understanding of what it means to be a reader and writer. The comments, at times, noted that they were more like their students than they thought. They wanted to process at lower levels, where they were being told what to do, instead of self-analyzing to problem-solve more independently. They don’t necessarily want to understand the “why”, but they want to know the “how” with procedures. Teachers at this time commented that the biggest barrier for their learning was a lack of time. Pinnell (1991) in *Bridges to Literacy*, concedes that few argue about the need for professional development but the greatest barrier to effective professional development is in agreeing how it must be implemented. For the teachers, time was their enemy. They didn’t have enough of it.

The conversations after the sessions (see Appendix L) and the visits, evolved into talking about self-analysis and trusting the student data while combining it with teacher observations to make teaching decisions. Everyone wanted to know what good reading and writing looked like at the end of a series of lessons. Some had commented that: “You could see it build”, “I assumed”, “Scaffolding”, “Student self-evaluation”, “Taught to focus on items”, “Need the theoretical background”, and “Transference to classroom”. Two teachers summarized their year using the following comments:

“Having the ability to think on my own and problem-solve.”

“Ask myself a lot of “W” questions.”

The comments in their journals (see Appendix I) and the June 2009 self-analysis (see Appendix D) indicated that they were beginning to make connections between the theory and practice. Through the analysis of their lessons they were verbalizing that their first group of students didn’t have the same advantage as the second group. They were also concerned
about how the students were transferring the learning to the classroom. The students needed to be taught to transfer the learning between the two sites. If this is not taught, it is difficult for students to make that transition. By the end of the year, confirmation of understanding was strengthening, and this was evident by their comments reported in the summary section of the Observation Survey (2002) in June 2009 (see Appendix L). Their main concern was that the students become more independent in reading and writing. My concern was for the teachers to become more independent and knowledgeable in their acquisition of theory, and use it in their practice.

During the year, there was more and more talk about involving parents/guardians in the teaching process. They were not expected to teach, but it was important for parents/guardians to be aware of the process of what was happening with their children. At the end of the year, there has been some progress (see Figure 4.15.) in involving parents in their children’s education, especially Reading Recovery. We depend on parents to help and understand how important it is to be literate in a changing world. We must build that link between the home and school. The inner circle of implementing Reading Recovery within a system is the learning that the children will undertake within their time in the intervention. Parents or guardians are part of this initiative to promote learning.

**Figure 4.15. Partnerships – Innovation Configuration – May 2009 – Outcome 12.1**
There is still a great deal of work to be done to include families in the process of understanding the education of their children. This would be an opportune time to make the stakeholders aware of why and what the professional development encompasses to promote the education of their children. Technology could be a valuable tool to keep in contact with parents and educational stakeholders. Outcome 7.4 – Technology-Innovation Configuration Map 2009 (see Figure 4.14.), commenting on technology also indicated we had some progress to make in this area.

**Knowledge about Literacy Behaviors and Skills/practice – Content**

In the conversations after sessions and especially with their analysis of the case study (see Appendix G), the teachers verbalized that it was very hard to analyze their own teaching. One teacher made the comment: “I don’t know what I learned. That is the hard part!” They realized that this had to be done but it was not easy for them. They also stressed that they learned that they had to concentrate on their positive strengths and build on them. The issue of barriers to learning also was reiterated in that they didn’t have enough time. They felt that Grade 2 teachers have to be reinforcing the same teaching in subsequent years so literacy professional development is a necessity for all grade level teachers. They verbalized that Grade 2 teachers needed to especially continue to reinforce the learning of Reading Recovery students.

There were comments that the learning from the Reading Recovery professional development was enabling the teachers to focus on children who were still at risk but were not chosen for Reading Recovery. They could apply the learning to their classroom setting. (Clay 2009) argued that staff development should enable teachers to make decisions that they might adapt to each child’s idiosyncratic patterns of competencies. It is hoped that this adeptness in decision making would be applied in all appropriate teaching venues. Differentiation could happen in their classroom. They really liked the fact that they worked
as a group, helping each other to learn. They became a strong professional learning community. Again some of the teacher’s best described their knowledge acquisition as:

“I think that we have to focus on early years.”

“If you don’t know any better you will revert to the known.”

“Your previous teaching experiences will determine how you teach.”

“Sharpens my teaching of students outside of Reading Recovery.”

“Isolated bits – No meaning!”

The whole integration of “what”, “why” and “how” was coming together. The teachers had to be continually prodded to self-analyze. Higher order thinking and processing must be developed when discussing literacy theory and practice. It is argued (Burroughs-Lange, 2009) that learning and effective teaching seems to fall into three areas of continued enquiry:

- Early literacy acquisition.
- Teacher learning.
- Effecting educational change in ephemeral political contexts.

Advocacy for quality professional development is an ongoing process that will hopefully encourage teachers to be aware of their strengths and work on building on their known. Teaching is a continuous process of questioning and finding answers. In Reading Recovery, professional development continues in subsequent years. It is a way of expanding the understandings of the initial year of professional development. Building a complex theory of reading and writing is an ever-changing continuum. Teaching and learning should reflect this!

Learning is a social event, and we learn from each other. If we do not have the time to work and consult with other teachers involved in and out of Reading Recovery, how can we develop and educate the whole child? Teachers are meeting with other teachers, but Outcome 1.1 (see Figure 4.16.) indicates that teachers meeting times are limited. If limited
time is allocated to working together, developing a higher order thinking process is difficult. If teacher learning is grounded (Askew, 2009) in observations of children as they learn, it would seem that time is of the essence in becoming better teachers. If time to meet is an issue, it is difficult to develop leadership at the school level. There would be no focused meeting times where an issue could be discussed in detail.

Figure 4.16. Opinion on Times to Meet – Change Over Time Innovation Configuration – Outcome 1.1

Reading Recovery has time built into the professional development process, and part of the plan is built on long-term learning. After the initial year of professional development there is a continuous focus on building the personal subject construct (see Figure 3.8.-C). Learning is considered essential and continuous. Clay began the Reading Recovery project in 1976 (Ballantyne, 2009) and present day Reading Recovery is rooted in at least 30 years of research, critique and advocacy that continues into the 21st Century.

Reading Recovery can be part of the accreditation process (NSDOE, 2005) where teachers are encouraged to form Professional Learning Communities to focus on student achievement. Time is allocated to meet and exemplary teachers may share expertise which creates a culture that may develop leadership abilities. Teachers should have an opportunity to continue to build on their personal subject construct in subsequent years. Reading
Recovery as part of the implementation circle demands through acceptance of standards and guidelines (CIRR, 2006) that teachers meet on a regular basis. It is important for teachers to interact and try ideas and formulate or reformulate understandings (Pinnell, 1991). This is how a phenomenon is understood. There are at least eight ongoing professional development sessions for Reading Recovery teachers each year to continue to develop knowledge and practice in Reading Recovery. This will continue to add to the teacher’s corpus of literacy knowledge, promoting leadership in the field. Table 4.16. – *Term 3-Summary*, is a summary of transformative learning in the third term of learning and teaching.

Table 4.16.

**Term 3 – Summary**

<table>
<thead>
<tr>
<th>Content/Practice</th>
<th>Building an understanding that theory underpins practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process/Self</td>
<td>Self-analysis – intermediate level that needs to be scaffolded</td>
</tr>
<tr>
<td>Context/Theory</td>
<td>Without knowledge of theory – can’t teach – Early years important</td>
</tr>
</tbody>
</table>

**Teacher Centered Continuing Professional Development**

**Learning from Reading Recovery**

This evaluation of teachers’ data indicates that there has been a transformation of learning. They built a body of knowledge to add to their personal subject construct (see Table 3.13. and 3.14.). Since the administration of the self-assessment tool (see Appendix C) there has been further development of the personal subject construct that includes an elaborated understanding of knowledge acquisition through theory, skills and self analysis. Teachers put tremendous time and effort in learning during the year of professional development. Within the confines of the Reading Recovery staff development framework, (see Figure 3.5.) teachers transformed their learning. With the collection of conversations, observations and events, three areas were studied, coded and reported as the learning that took place over a period of time. It was evident that teachers had undergone a sustained
period of professional development that was grounded in theory, collaboration, on-going assessment of student and teacher knowledge as well as a learn/teach mentality that was supported by a mentor. The first set of information used was supplied by teachers with their self-assessment questionnaire (see Appendix B &C) that formed their personal subject construct within the first and third terms of their professional development. The change over time in their understandings was noted and recorded in Chapter 3.

The following Table 4.17., *Comparison- Theory, Practice and Self -Change Over Time*, is a summary that depicts the change over time in learning that the teachers underwent during a full academic year of professional development.

**Table 4.17.**

*Comparison – Theory, Practice and Self*

*Change Over Time in a Personal Subject Construct*

<table>
<thead>
<tr>
<th>Theory</th>
<th>Teacher</th>
<th>Teacher Leader</th>
</tr>
</thead>
</table>
| **Term 1 - Theory** | Reading and writing everyday  
Word solving/ comprehension strategies  
Guided practice – repeat Strategy  
Modeling and doing  
Reading and writing a process  
Reading and writing are linked. | Focus on procedural aspects of lesson |
| **Term 3 - Theory** | Reading and writing are linked.  
Teach letters/ sounds/words in context.  
Make meaning from the known.  
Use structure.  
Use visual information.  
Daily  
Reinforce strategies  
Reading strategies | Building an understanding that theory underpins practice. |
Begin early.  
Immersed in Reading and writing

<table>
<thead>
<tr>
<th>Practice</th>
<th>Teacher</th>
<th>Teacher Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term 1 - Practice</strong></td>
<td>Daily exposure</td>
<td>Telling versus revealing</td>
</tr>
<tr>
<td></td>
<td>Directly taught</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mini/lesson –whole group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sharing time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word list</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home reading program</td>
<td></td>
</tr>
<tr>
<td><strong>Term 3 - Practice</strong></td>
<td>Reading and writing everyday</td>
<td>Without knowledge of theory – can’t teach</td>
</tr>
<tr>
<td></td>
<td>Sense of ownership</td>
<td>Early years are important</td>
</tr>
<tr>
<td></td>
<td>Reading and writing genres</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated across curriculum areas.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time to practice.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduce new words/word lists/context.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice of books.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading workshop.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mini lessons/whole lessons.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home reading program</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self</th>
<th>Teacher</th>
<th>Teacher Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term 1 - Self</strong></td>
<td>50%</td>
<td>Limited self analysis and limited student data analysis</td>
</tr>
<tr>
<td></td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>78%</td>
<td></td>
</tr>
<tr>
<td><strong>Term 3 - Self</strong></td>
<td>75%</td>
<td>Self-analysis – intermediate level that needs to be scaffolded</td>
</tr>
<tr>
<td></td>
<td>76.3%</td>
<td></td>
</tr>
</tbody>
</table>
Reading Recovery, if included within the umbrella of accreditation (NSDOE, 2005) should help the school improvement process through teacher and student learning. There are indications from this research that teachers and students will benefit from the Reading Recovery professional development. The school as a whole might benefit if the teacher shares the knowledge with colleagues, but only if the teacher shares. There are indications (see Figure 4.16.) that teachers don’t pay particular attention to working with other teachers. As Reading Recovery is very specialized and focused professional development on literate behavior, this knowledge may be utilized beyond the confines of Reading Recovery. It should be possible to transfer the learning gleaned from this study about professional development to other educational settings. Clay (2009) makes it clear that the teaching procedures were never meant for general use within a classroom. Therefore, it is understood that the Reading Recovery staff development model was meant for use in the development of Reading Recovery teachers. There was no attempt to alter the Reading Recovery professional development framework, but the theory underpinning the development of teacher learning through a process of professional development will be utilized within educational ideology of planning professional development within a system. If Reading Recovery teachers are considered exemplary (Stringfield et al. 2000, Pressley & Roehrig, 2005) the foundational theory on learning is sound and can be used to create a generalized professional development framework that is grounded in theory, collaboration, on-going assessment of student and teacher knowledge along with a teach/learn mentality that is supported by a mentor. This study was founded on the understanding that a new theory of professional development beyond Reading Recovery would develop from this research. It was decided early on that the methodology would be grounded in theory of learning and professional development and that would allow for the postulating of a new theory that grew
from studying the learning undertaken in Reading Recovery. Reading Recovery teachers have often been described as exemplary teachers (Presley & Roehrig, 2005) that are empowered (Burroughts-Lange, 2009) by their search to understand a phenomenon (Pinnell, 1991). They develop professional expertise through a process of staff development that is grounded in more than 30 years of research and development (Clay, 2009). Since then, Reading Recovery professional learning model has been validated in research studies as an important factor in Reading Recovery’s success as an intervention (Pinnell, Lyons, DeFord, Bryk & Seltzer, 1994) prompted this study. It must also be realized that the Reading Recovery staff development model was conceived for Reading Recovery implementation and was never meant for other implementations. When Reading Recovery was first conceived in 1976 it was then rooted in 30 years of research, critique and advocacy (Watson, Askew, 2009). Clay had already spent those years working with children who were becoming literate. Her initial research challenged established assumptions about literacy behaviors and how children experiencing challenges in becoming literate should be taught. In publishing *The Reading Recovery Research Reports* (Clay, 2009) she shared the research process with the world to shed transparency on the methodological framework of the development of Reading Recovery. Through the development of an interactive staff development model of learning, it was discovered (Pinnell, 1991) that learning is applied to both children and teachers. The major characteristics of the Reading Recovery staff development model were discovered to be:

1. Interactive.
2. Both students and teachers learn.
3. A constructive learning process.
4. A notion to build on the known.
5. Language based.
6. Research based.
7. Preventative versus descriptive.

When Clay (2009) replicated her original study, she concluded that the good results achieved were gained on the risky foundation of the implementation. Implementation standards and guidelines were deemed necessary and they were created to maintain integrity of the intervention. When Reading Recovery migrated to North America (Clay, 2009), it was necessary to develop standards and guidelines that would remain true to the original work and it would mean that data from a fully implemented intervention would be available. In Canada, the Standards and Guidelines of Reading Recovery (CIRR, 2006) were developed by the Canadian Institute of Reading Recovery. At its roots, Reading Recovery is built on a foundation that includes three concentric circles that supports teacher and student learning. The outer circle is the implementation, the middle circle is the three tiers of teacher expertise and the inner circle is the student (Pinnell, 1991). This is the framework that grounds the initiative in research and promotes learning. The framework is much more complex than presented, and Figure 4.17. – Overview of Reading Recovery Implementation, is only meant to offer a snapshot of a complex process.

Figure 4.17. Overview of Reading Recovery Implementation
The group of teachers participating in this study did build on their own theory of what they needed to learn. Studies conducted on Reading Recovery professional development made clear that shifts in learning from skills to orchestration of theoretical understandings (Pinnell & Woolsey, 1985, Pinnell, 1991, Herman and Stringfield, 1997, Pinnell et al, 1994) was possible for teachers. The teachers participating in this study also made changes in their learning. This was explored and further explained by the use of Atherton’s theory that we must build on a personal subject construct of learning (see Figure 3.8.- C). This construct was applied so that there might be an expanded understanding of the learning that was equated to learning theory. This was a different way of looking at teacher learning within Reading Recovery professional development. I sought a construct that could be easily understood and applied it in other situations beyond Reading Recovery. It is a way of understanding and showing through research what Clay might have meant when she coined the term orchestration of theoretical understandings. The personal subject construct was built on the foundation of learning theory widely understood today (see Table 3.1.).

Teacher learning, as described in the Teacher Learning Model (Pinnel, 1991) lists that learning changes over time from emerging, developing and then becomes autonomous. It was important in planning and carrying out this research that a process becomes evident that learning was being transformed. Pinnell (1991) indicated that research clearly shows the shifts from skills to orchestration. It was important for me to tease out the theoretical implications of Mesirow’s (1978) notion of what he meant by transformative learning. This again was a different way of looking at planning for Reading Recovery teacher learning over time. His work laid down the foundation of looking at professional development over a period of time based on the theoretical rationales of present day learning ideologies. This was where I had the idea of dividing the Reading Recovery professional development into blocks of time over the year emanated. These timeframes allowed for the tracking of evidence to show change over time in teacher learning. In the first, second and third terms I
could show the transforming of a personal construct of knowledge over the span of an academic year.

So, looking back to Chapter 2, the development of rationales for the conducting of this research is grounded in the theory surrounding Reading Recovery professional development. This is not a study about Reading Recovery but it is about the learning through professional development that enables the teachers to transform their learning. The continuum of learning is what must be understood so that it may guide the construction of a generic framework to conduct future professional development outside the confines of Reading Recovery.

**How to Plan for Transformative Learning?**

The Reading Recovery staff development framework is very well developed and its integrity is maintained by very specific standards and guidelines. Learning in Reading Recovery was documented, analyzed and discussed along the lines of what and how it was learned. The learning was summarized into a personal subject construct (see Figure 3.8.-C) and then the learning is described as transformative (see Figure 4.1.) over time. Again, there was an attempt to look outside the Reading Recovery professional development model to explain the process of transformative learning. This was an effort to help me understand professional development beyond the boundaries of Reading Recovery but would yield the same major characteristics of the Reading Recovery staff development model. Over the span of this study, a pattern of processes began to develop that might explain why Reading Recovery teachers become known as exemplary teachers (Davis, Sumara & Luce-Kapler, 2008, Fitzharris, Jones, & Crawford, 2008, Farrall, 2006, Pressley & Roehrig, 2005). This was necessary, if there was to be development of an understanding around offering professional development beyond Reading Recovery that had similar results reported by Reading Recovery. A pattern of processes necessary to learning began to take shape during the conducting of this research within the confines of Reading Recovery professional
development and the literature on professional development. The following Table 4.18. – *Pattern of Processes*, is presented to list the pattern of processes to this point, but it is not meant to suggest that there is a sequence to these processes.

**Table 4.18.**

*Pattern of Processes*

<table>
<thead>
<tr>
<th>Pattern of Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• a determination of academic needs</td>
</tr>
<tr>
<td>• a process that organized the learning or some type of plan</td>
</tr>
<tr>
<td>• a need for standards that guided the implementation</td>
</tr>
<tr>
<td>• an assessment of the process that would re-evaluate the needs of professional development</td>
</tr>
<tr>
<td>• grounded in theory</td>
</tr>
<tr>
<td>• collaboration</td>
</tr>
<tr>
<td>• on-going assessment of student and teacher</td>
</tr>
<tr>
<td>• learn/teach mentality</td>
</tr>
<tr>
<td>• an understanding how adults learned</td>
</tr>
<tr>
<td>• mentor/Teacher Leader</td>
</tr>
<tr>
<td>• transform teacher and student learning</td>
</tr>
</tbody>
</table>

The construction of a new framework is meant to look at the process of implementing professional development that lays a foundation for a change in teacher learning. As before, central to this change is knowing what personal subject construct (see Figure 3.8. - C) or knowledge is needed to make the changes. What do you want the teachers to learn? This construct is the core of any professional development framework and it will change with the determined needs of a system, teacher or initiative. The conception of a new framework for professional development is like a geological survey. You have to dig through many layers to get to the core. In this case, the core is the personal subject construct (see Figure 3.8. - C), and from the core I assumed that there must be a process in place that builds outwards on the personal subject construct. The efficacy of the professional development will determine the
growth and success of the personal subject construct. The layers that are built around the core are the parts of the professional development that must be considered to maintain active intrinsic and extrinsic motivation (see Figure 3.4.) proposed to make learning possible.

To meet the goals and characteristics of Reading Recovery (Clay, 2005) it is necessary that there is a solid foundation of professional development built into the overall design of offering the intervention. As previously stated, knowing what must be learned is not enough. What follows is a way of looking at offering professional development that could explain the process undertaken in transforming learning. The patterns of processes (see Table 4.18.) developed during this research must be explained. How could this be done?

I had to think about what is possible for individual learners as they continue to change. When professional development permits practitioners to take different routes to the same desired outcomes, we may see the expansion of possibilities. Changes in offering professional development may come about because of an examination of effective teaching procedures based on current theory that leads to an action to better one’s practice. With thinking about the learner having changed, it is now time to stretch my own thinking again. Reading Recovery professional development has been linked to the success (Pressley & Roehig, 2005) of teaching and learning. How could that success be replicated outside the confines of Reading Recovery by incorporating the pattern of processes within the design?

The Design of a Generic Professional Development Framework

The First Ripple

With an understanding that the pattern of processes had to be explained in a concrete manner, it was time to consult the theoretical understandings of planning professional development. The pattern of processes uncovered must fit into a plan for professional development to see similar results in learning as the teachers in Reading Recovery. The framework for designing effective professional development, developed by Cook and Rasmussen (1994), can lead schools through a process of identifying, understanding,
planning, carrying out, and evaluating change. This framework can be made to fit with the pattern of processes (see Table 4.18.) uncovered within this research. This framework consists of:

1. **Identification** - The inner core of the framework is the literacy construct previously presented (see Figure 3.8 - C), and lays the foundation by describing the needs of a system or learner.

2. **Understanding** – This might be better explained as understanding the needs of a system or learner.

3. **Planning** – This section is categorized by the need to have a framework that carries the learning forward.

4. **Carrying out** - the third section is carrying out the plan or implementation.

5. **Evaluating change** - finally there is an accountability piece that is considered the evaluative phase of the whole process.

The developing framework will be discussed in the order that they were numerically presented. The pattern of processes that were summarized from the research work thus far will be included to inform the link between the learning as part of Reading Recovery professional development, and background literature on learning. A proposed professional development framework that may be used outside the confines of Reading Recovery will be developed. This new framework begins with a description of the first ripple moving outward from a personal subject construct of that proposed construct. The first ripple consists of the four steps proposed by Cook and Rasmussen (1994).

**Identification and Understanding**

Beyond identifying what is needed by a system, it is first important to develop an understanding of what personal subject construct the teachers are presently working from within their practice. It is not enough that the teachers learn to critically reflect on their practice. It is also important that a facilitator is responsible for offering the professional
development; share in the process. The first thing the facilitator must do is to pose some questions that must be answered by the teachers. These questions help in the understanding of what constitutes the teachers present personal subject construct (see Figure 3.8 - C). In Reading Recovery, it is important to start from the known, so it is important to investigate what constitutes the teachers present understandings of literate behavior. This study began with the administration of a self-assessment tool (see Appendix C) that was meant to gather information about their personal subject construct and the results were reported in Table 3.13.

- Term 1-Personal Subject Construct-September 2008, Table 3.14. – June 2009-Personal Subject Construct and Table 3.15. – Follow up Interview-December 2009.

Some further points or understanding that a facilitator of professional development might consider for understanding teachers personal subject construct are:

- Understand the teacher’s perspective.
- As with children, you have to build on the teacher’s strengths.
- Keep in mind that these are adult learners that must be respected and involved in the process.
- Understand that teachers will be threatened and frightened by not being in control of what they are learning.
- Understand that assessment for learning will be difficult.
- Understand that their teaching methods might only include a traditional framework of reference.
- Understand that the time commitment is important to consider.
- Understand that for some teachers the learning curve will be great.
- Understand that teachers want quick fixes, without knowing the theory.
- Understand that learning is a process – Learning to do, learning to be and learning to be part of (Delors, 1989).
The above considerations comprise a summative evaluation of what the teachers know and understand as being their personal subject construct of teaching. It is important for teachers to evaluate each point so that a plan can be implemented to build capacity within their practice in order to maximize student’s achievement. A literacy construct of knowledge would be expected in Reading Recovery and it is presented in Table 4.19.

*Literacy Construct of Knowledge - Reading Recovery*, as an example of a beginning personal subject construct. This summarizes what comprises a personal subject construct of knowledge for teachers involved in the year-long Reading Recovery professional development.

**Table 4.19.**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Self</th>
<th>Critical thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs of literacy education</td>
<td>Build on strengths</td>
<td>Adult learners</td>
<td>Want quick fixes, and must be made to think, reflect and try</td>
</tr>
<tr>
<td>Belief of assessment practice</td>
<td>Actual assessment practices</td>
<td>What control do they have</td>
<td>Understand that learning is a process – Learning to do, learning to be, learning to be part of (Delors, 1996)</td>
</tr>
<tr>
<td>What must be learned about theory</td>
<td>What must be learned about practice</td>
<td>Present teaching methods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time commitment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once there is an understanding of the needs around learning that must take place, it is time to plan the professional development. A good first step is again asking questions. These might include:

- What formats and approaches are used in the design? Are learning theories considered? (Clay, 1993, 2001).
- Which approach might be necessary to explore in detail?
- Having decided on the changes and learning necessary, what might enhance the plan?
- What are the resources?
• Have you thought about the teacher learner categories from Chapter 3? (see Table 3.11.)
• Have you thought about professional learning communities? (MacQueen, 2001)
• Have you thought about Accreditation? (NSDOE, 2005)
• What is the evaluation plan? Identify possible criteria for evaluating the overall design and process.
• How will you support teachers?
• Have you thought about lesson study? (Brooks, 2009)

Asking questions might help but the planning is much more involved than just posing questions. At this time I was thinking about the Reading Recovery staff development model (Pinnell, 1991) as an involved process built on the foundation of time and research. Therefore, I assumed that it is important to include the seven principles of highly effective professional learning (Department of Education and Training, 2005) that include the pattern of processes (see Table 4.18.) uncovered during this study. These are listed as:

1. Professional learning is focused on student outcomes.
2. Professional learning is focused on and embedded in teacher practice.
3. Professional learning is informed by the best available research on effective learning and teaching.
4. Professional learning is collaborative, involving reflection and feedback.
5. Professional learning is evidence based and data driven.
6. Professional learning is ongoing, supported and fully integrated into the culture and operations of the system – schools, networks, regions and the centre.
7. Professional learning is an individual and collective responsibility at all levels of the system and it is not optional.

For this study, an attempt was made to discover a way of understanding the process of learning during Reading Recovery professional development. The research in Reading
Recovery suggests that teacher’s understandings change over time. How was this possible?

To understand, organize and eventually explain the learning, the Reading Recovery data surrounding learning was evaluated and explained. To do this, prevalent learning theories (see Table 3.11.) were consulted so that a concrete explanation may be offered toward that process of learning over time. Within Chapter 4, this led to the categorization of transformative learning.

**Planning the Professional Development**

The following plan is proposed as a way of looking at transformative process of learning. This timeframe is meant to deconstruct and reference time as a process to learning. Reading Recovery professional development is transformative learning (Mesirow, 1991) at its best. This is an alternative view of how learning may be understood and planned. This is done so that I may possibly understand the conceptualization of the professional development process undertaken by the research group while involved in Reading Recovery and then be able to use it independently of Reading Recovery.
Table 4.20.

Planning for the Learning Process – Reading Recovery

Level 1, Term 1 – September to December

<table>
<thead>
<tr>
<th>Time of Year</th>
<th>Theory</th>
<th>Type of P.D.</th>
<th>Reading Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 1</td>
<td>Procedural Theory</td>
<td>Standardized PD</td>
<td>1. Lesson study</td>
</tr>
<tr>
<td>Lower order processing of</td>
<td>Inactive and active</td>
<td>Procedural/practice sessions</td>
<td>• Individual</td>
</tr>
<tr>
<td>cognitive function</td>
<td>participants</td>
<td>Primary stage of PD</td>
<td>• Group</td>
</tr>
<tr>
<td>Take notes</td>
<td></td>
<td><a href="http://www.teachernet.gov.uk">www.teachernet.gov.uk</a></td>
<td>2. Theory</td>
</tr>
<tr>
<td>Collect programs to teach</td>
<td></td>
<td>(2009)</td>
<td>• Guidebook</td>
</tr>
<tr>
<td>Introduction to literacy theory</td>
<td></td>
<td>Focus;</td>
<td>• Articles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shown how, and why</td>
<td>3. Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Collection of data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Daily teaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• What has student learned?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• What do they now have to learn?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• What have you learned?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• What do you now want to learn?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. Resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Coach</td>
</tr>
</tbody>
</table>

The second level of the planning process should bridge the gap between practice and the use and understanding of the underlying theory. This has been classified as Term 2 and is explained in Table 4.21. – Planning for the Learning Process-Reading Recovery-Level 2, Term 2-January to March.
**Table 4.21.**

*Planning for the Learning Process – Reading Recovery*

**Level 2, Term 2 – January to March**

<table>
<thead>
<tr>
<th>Time of Year</th>
<th>Theory</th>
<th>Type of P.D.</th>
<th>Reading Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridging the gap between lower order and higher order (cons) cognitive function</td>
<td>Developmental Scaffolded – Vygotsky – Learning is socially mediated (2009)</td>
<td>Site Based Theory + Practice 6 sessions</td>
<td>1. Lesson study • Individual • Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focus; Capturing useful experiences</td>
<td>3. Research • Study of data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assess practical benefits</td>
<td>4. Practice • Daily teaching • Practice video analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What can we do now that we couldn’t before?</td>
<td>• What have they learned? • What do they now have to learn?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within school - coaching, mentoring, school networks <a href="http://www.cipd.co.uk">www.cipd.co.uk</a> (2009)</td>
<td>5. Assessment • What have you learned? • What do you now want to learn?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. Resources • Materials • Time • Coach • Research • Technology</td>
</tr>
</tbody>
</table>

The third level of the planning process should see teachers using theory to understand their practice and make decisions based on their understandings of that theory. This has been classified as Term 3 and is expanded in Table 4.22. – *Planning for the Learning Process - Reading Recovery, Level 3-Term 3-April to June.*
Table 4.22.

Planning for the Learning Process – Reading Recovery

Level 3 – Term 3 – April to June

<table>
<thead>
<tr>
<th>Time of Year</th>
<th>Theory</th>
<th>Type of P.D.</th>
<th>Reading Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 3 / Higher order processing of cognitive function</td>
<td>Critical Theory / Scaffolded / Links learning to practice and own goals / Active participant / Activates cognitive clusters / Phenomenology</td>
<td>Self-Directed / Theory and Practice – Metacognition / 6 sessions / Final stage / <a href="http://www.teachernet.gov.uk">www.teachernet.gov.uk</a> Focus; What is reflective learning? Accept responsibility for own learning. Learn how to learn. Use new knowledge and skills Reflection becomes routine <a href="http://www.cipd.co.uk">www.cipd.co.uk</a> See learning as intrinsic part of job.</td>
<td>1. Lesson study • Individual • Group 2. Theory • Guidebook • Articles 3. Resources • Research • Data analysis • Coach • Technology 4. Practice • Daily teaching • Video analysis • What have they learned? • What do they now have to learn? 5. Assessment • What have you learned? • What do you now want to learn?</td>
</tr>
</tbody>
</table>

As the above tables illustrate, the plan that is proposed helps to understand the possible learning process undertaken within Reading Recovery initial professional development. The plan is depicted and divided into three phases of learning. The levels of learning (see Table 3.1.) are delineated as periods of time during the year based on the theoretical postulations of how we may learn.

Teachers that were part of this group had their understandings change over the course of the offered professional development period. At the end of the period of initial Reading
Recovery professional development, the teachers seemed ready to be more independent in making teaching decisions. They also seemed able to effectively decide what they must now learn. This is a journey that I classified as transformative learning (Mesirow, 1978).

Learning is never this simple. There is a continuous blurring of the lines between the three steps that require the student to move forward and backwards throughout the journey of transformative learning to build their personal subject construct (see Table 3.8. - C).

**Carry out the Plan**

Now that an understanding and plan have been put forward, it is important to carryout or implement the plan. Reading Recovery professional development is set to meet the needs of the teachers, whatever the level of understanding from the teachers. When involved within the Reading Recovery family, it is imperative that the standards and guidelines proposed by the Canadian Institute of Reading Recovery (2006) be understood and adhered to, so that implementation of the intervention is successful. The standards guide the process. This structure allows for checks and balances to ensure focused and sustained teaching and learning by the teachers and their students. There must be a commitment to ongoing professional development if change is to happen (Fullan, 2001). Reading Recovery planners have made sure of this by registering the trademark, thus ensuring compliance to the CIRR standards and guidelines (2006). A system must adhere to these guidelines to offer Reading Recovery as an early intervention. Checks and balances are woven throughout the process of professional development.

There is also a three-tiered support network of Reading Recovery Trainers, Teacher Leaders and teachers, to help foster learning and bridge any learning gaps. The Canadian Institute of Reading Recovery (CIRR) is the governing body, which advocates for the Reading Recovery Trainers and Teacher Leaders to be in place to offer the professional development at a district level. So, continued support and advocacy for excellence in teaching and learning are expected. The success of the intervention depends on the teacher’s
ability to teach children to read and write. The planning process also takes into account how adults learn (see Table 3.10.) and then the professional development is founded on the belief that learning is transformational and is done as part of a community of learners. This was illustrated in Table 3.11. – *Foundation of Learning*, where categories of learning, categories of offering professional development, foundations of learning and the different levels of learning are then all linked to a process of learning. This is not a linear process but one that continually fluctuates throughout the learning process.

Because learning is a transformational process, there are numerous in-services planned during the year. In Reading Recovery, there are approximately 46 hours of planned professional development sessions during the year. Each in-service session consists of a theme or focus, lesson study, discussion of lesson to apply theory to learning, teaching and practice. There is a time for discussion of implementation issues and a self-evaluation of the learning for that day. Table 4.19. – *Literacy Construct of Knowledge-Reading Recovery*, Table 4.20. – *Planning for the Learning Process-Term 1*, Table 4.21. – *Planning for the Learning Process-Term 2*, and Table 4.22. – *Planning for the Learning Process-Term 3*, examines the type of Reading Recovery professional development activities that take place during the first, second and third terms of this framework.

The 46 hours consist of 18 meetings throughout the year, where the study of lessons is the main focus of the learning. Lesson study (Lewis, 2002) is a very important part of the learning process. Lesson study is a process for identifying goals for student learning. One teacher teaches, followed by a sharing and analysis of the lesson. This is better explained in Figure 3.5. – *Reading Recovery Teacher Learning*, the proposed learning process. There can be a refining of the lesson and re-teaching may happen. Reflection is an important and integral part of the whole process. Also, as part of this year of initial professional development, the Teacher Leader visits with the teachers a minimum of five times. This is another aspect of lesson study and it gives individual teachers the opportunity to focus
specifically on their own teaching. In all, the formal professional development consists of approximately 51 hours of professional development during an academic year.

In summary, a new framework for professional development must have a structure in place that supports the implementation of group work, support for teachers, and time and opportunity for lesson study as part of a group or on an individual basis.

Describing the Effectiveness of the Design

Following the implementation of the professional development initiative, it is imperative to describe the effectiveness of the design. An evaluation is important to the process. Any conceptual framework is, of course imperfect. The framework presented may seem simplistic in nature, but in essence is very complicated. School systems and professional development facilitators have access to many pre-packaged professional development kits which seem attractive because of the complexity and time needed to plan effective relevant professional development. The re-conceptualizing of the Reading Recovery professional development framework, with the help of teachers in their initial year of teaching Reading Recovery, has clarified that professional development is complex and difficult to plan and evaluate. Evaluation of the learning in Reading Recovery is evident by the collection of the data relating to student learning (Clay, 2002). As well, important information is available through the observations of lessons, and the resulting Teacher Leader notes. The observations noted along with conversations and information gathered and noted as events may be collected, coded and reviewed by the Teacher Leader. In the United States of America, The International Data Evaluation Center (IDEC) (2010, June 25) codes and nationally collates their Reading Recovery data. Canada presently does not have a centrally organized evaluation center to collect and report on data trends. All data in Canada is collected in the Atlantic, Central, Prairie and Western regions of the country. The Reading Recovery trainers have assumed the responsibilities of reporting data for the country. Reports are written at the school, provincial and national levels to measure student progress
and postulate the needed changes to implementation. The collection of data may be as simplistic as collecting reading levels at different points during the year.

Looking beyond postulating a framework that could be used to foster learning, I linked Cook and Rasmussen’s (1994) professional development framework to the patterns of processes that were discovered to exist in Reading Recovery professional development. Table 4.22. – *Links*, offers a way of looking at a link between Reading Recovery learning through professional development and the generic framework offered in the works of Cooks and Rasmussen (1994).

**Table 4.23.**

*Links*

<table>
<thead>
<tr>
<th>Cooks and Rasmussen’s framework</th>
<th>Pattern of Processes in Reading Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>• a determination of systemic needs</td>
</tr>
<tr>
<td>Understanding</td>
<td>• a determination of academic needs</td>
</tr>
</tbody>
</table>
| Plan                            | • a process that organized the learning or some type of plan to explain the process  
|                                 | • a need for standards that guided the implementation  
|                                 | • An understanding that no professional development stands alone  |
| Carry-Out plan                  | • An organizational process must be in place to understand transformational learning  |
| Evaluate plan                   | • An assessment of the process that would re-evaluate the needs of professional development and the needs of the teachers.  |

The following Figure 4.18. – Four Step Process in Planning Professional Development, depicts a visual representation of a partially developed professional development framework that incorporates the patterns of processes (see Table 4.22.) and the Cook and Rasmussen framework to build a generic process that may be used outside the
walls of Reading Recovery to still see the development of teachers (Pressley & Roehrig, 2005) with exemplary practices. This figure is meant to depict the levels of a change process while considering the personal subject construct is central to understanding the whole process.

**Figure 4.18. Four Step Process in Planning Professional Development**

![Four Step Process in Planning Professional Development](image)

The first ripple of the generic professional development framework incorporates the foundational construct of a complex process. The generic framework cannot end at this point because it was felt that Reading Recovery had such a good system of checks and balances (CIRR, 2006) to ground the implementation that any new framework must also have some specific checks and balances. There must be a system of checks and balances that ground the framework to the personal subject construct (see Figure 3.8. – C). In consideration of this, a second ripple along a continuum of planning professional development could be considered so that the initiative is sustainable. Part of the success of Reading Recovery is an inclusion in the planning process of standards that guide and protect the integrity of the process and types of learning required. With that in mind, a second ripple is proposed for the generic framework.
The Second Ripple

Standards

Throughout our lives, there are certain standards and principles that guide us to be good and productive citizens of our communities. It is similar when planning professional development. The National Staff Development Council (NSDC, 2001) has set out standards that may be followed when planning professional development. If consulted, these standards will keep the goals of professional development on track. The process can help to define quality and measure fidelity of professional development (United Nations Literacy Decade, 2003–12). You may also choose to administer an innovation configuration (2005) that permits an examination of teacher opinions on the standards of the professional development. The NSDC’s standards (2001) are laid out in three broad categories and under each category are the desired outcomes. For the purpose of this study, I modified them to include Reading Recovery. I thought that it was important when planning initial Reading Recovery professional development to keep in mind the three broad categories of the standards.

Context Strand

The first strand or category is a context standard. In its basic form this standard deals with knowledge about literacy theory. More specifically at the end of the professional development the teacher can:

- Articulate the intended results of professional development on practice.
- Articulate the benefits of professional learning.

To meet the context standard the teachers must:

- Meet regularly with colleagues during the school day to plan instruction which includes Reading Recovery.
- Align work with school improvement goals (NSDOE, 2005).
- Participate in varied learning teams, some of whose membership extends beyond present involvement.
• Participate in instructional leadership development experiences.
• Serve in a variety of instructional leadership roles.
• Contribute to the planning of school-based professional learning.
• Articulate the intended results of PD on teaching practice.
• Advocate for support of professional development.
• Articulates the benefits of professional learning.
• Participates in professional development during the workday.
• Accesses funds to support learning priorities.
• Receives external and internal support related to learning priorities.

Process Strand

The second strand or category is a process standard. This standard is defined as teachers developing the knowledge about the professional self. More specifically, at the end of the professional development the teacher can:

• Analyze data to determine their learning needs.
• Analyze data to determine the students’ needs.

To meet the process standards the teacher must:

• Analyze student data to identify adult learning priorities at the classroom, school, and regional level.
• Analyze a variety of data to identify learning needs of the professional.
• Work with colleagues to use the data to establish professional learning goals.
• Analyze relevant student data in order to monitor and revise improvement strategies.
• Contribute a variety of data to evaluate the impact of professional development.
• Collect and analyze data to determine the impact of professional development.
• Use educational research when making instructional decisions.
• Participate in a variety of appropriate staff development designs aligned with expected improvement outcomes.

• Participate in long-term and in-depth professional learning.

• Implement new practices as a result of follow up sessions.

• Use technology as a component of professional learning, when appropriate.

• Participate in a variety of professional development experience appropriate to career stage.

• Engage in professional development that considers participant concerns about new practices.

This professional development must also involve collaboration (PLC), where the teacher:

• Participates in a culture that is characterized by collegiality and shared responsibility.

• Develops knowledge about effective group process.

• Collaborates successfully with colleagues.

• Uses effective conflict management skills with colleagues.

• Uses technology to support collegial interactions.

**Content Strand**

The third strand or category is a content standard. Broadly defined, this standard advocates teachers having to demonstrate a deep understanding of literacy behaviors and develop literacy skills to improve their practice.

To meet the content standards, the teacher must:

• Demonstrate a deep understanding of subject matter that helps students to meet rigorous standards.

• Use appropriate instructional strategies that help students meet rigorous standards.

• Use various assessment strategies to monitor student progress toward meeting standards.
If the NSDC considers these standards important for staff development, Reading Recovery has to be put to the test of meeting these national standards. Simpson and Montgomery (2007), states that Reading Recovery meets the NSDC’s standards for professional development. It is important that a comparison of the NSDC standards and Reading Recovery take place. Appendix O, lays bare the equating of the Reading Recovery professional development and the NSDC’s standards. It is concluded that Reading Recovery adequately meets the Context, Process and Content standards for good professional development. These standards are the thread that help to bind the four step process in planning professional development (see Figure 4.18.). When defining the Context, Process and Content standards, it was discovered that they equate to the knowledge included in the personal subject construct (see Figure 3.8. – C). The Standards (NSDC, 2001) link directly back to the central core of the learning that includes practice, theory and self. This link has led to the expansion of the coding matrix (see Table 2.3.) to include NSDC’s (2001) standards. This linkage helps to solidify the viability of the generic professional development framework by acknowledging what must be learned as central to a professional development initiative.

Table 4.24.

Coding of Qualitative Data – B

<table>
<thead>
<tr>
<th>Stage</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes-Open coding</td>
<td>Identify anchors-key Points – Investigate a process of learning. Memoing- writing memos</td>
</tr>
</tbody>
</table>
| Concepts-Axial coding | Coding similar content – grouped  
|                   | • Practice 
|                   | • Theory 
|                   | • Self Memoing |
| Categories-Selective coding | Similar concepts 
|                   | • Context 
|                   | • Process 
|                   | • Content Memoing |
A collection of explanations

A) **Context** – knowledge about literacy theory. Articulates the intended results of the professional development on practice and is able to articulate the benefits of professional learning.

B) **Process** – knowledge about the professional self. The analysis of student data to determine own needs and determine student needs. Articulation of these processes is listed and grouped.

C) **Context** – knowledge about literacy theory. Articulates the intended results of the professional development on practice and is able to articulate the benefits of professional learning.

(The conversations, products and events are transcribed and the information is coded. The coding involved counting or writing each mention of the coding topics. The information is then arranged under the coded headings. The information then can be qualified or quantified.)

The coded documents are included as Appendices.

<table>
<thead>
<tr>
<th>Theoretical codes</th>
<th>Context – Knowledge about literacy theory,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Process – Knowledge about the professional self,</td>
</tr>
<tr>
<td></td>
<td>Content - Overall improved practice</td>
</tr>
</tbody>
</table>

A further validation of how important the standard of practice is to planners of professional development is included in the *Report and Recommendations of the Education Professional Development Committee in Nova Scotia* (2009). This committee recognized that there has to be set standards of practice that link to theory, practice and a self determination of teacher needs. This would enable teachers to become highly effective educators.

Teachers, as adults have some specific wants and needs that are different from the students they teach. The third ripple of the generic framework is an attempt to acknowledge and understand that adults as learners should be considered in any professional development initiative.

**The Third Ripple**

**Adult Learners**

Chickering and Gamson (2009) when discussing good practices, propose some principles that could define good professional development for adults. One of those principles is understanding how adults learn. Professional development for adults must be respectful of the audience and the experiences they have had. This principle forms the third
circle or ripple of my proposed professional development framework. When discussing any kind of professional development, keep in mind that good practice encourages student-faculty contact. This contact should be frequent and productive. Reading Recovery is built on the foundation of daily teaching of students. Teachers constantly practice new learning and see change in action (Pinnell, 1991).

Good practice encourages active learning. Reading Recovery is planned on the foundation of scaffolded instruction, daily, and requires the student:

- To take on what they have learned, perfect it and then move on to higher order literacy processing. The student, as well as the teacher, takes on new learning every day.

- To give prompt feedback. Reading Recovery teaching is one-on-one and may teach to the specific needs of the student daily. Teachers are supported in learning the theory and practice by referring to the Reading Recovery Guidebook and the Reading Recovery Teacher Leader to scaffold their learning. The Teacher Leader scaffolds teacher learning.

- Emphasize time on task. Reading Recovery daily teaching is focused on the needs of the student. Teachers must make every effort to teach every day as small gains are made with the hardest to teach. This process also facilitates the teachers’ learning.

- To communicate high expectations. Reading Recovery teachers always expect that students will master reading and writing at an appropriate level. Teachers are then expected to master the procedures and theory to improve their practice.

- To respect diverse talents and ways of learning. Reading Recovery expectations are that the learning is individualized and supported. This is represented for both teachers and students.

Adults must be respected as learners and have time to process their learning. The different ripples of this generic professional development framework are presented with
change or transformation of learning in mind. This change would be in the development of a personal literacy construct of knowledge as described in Figure 3.8. – C. Change doesn’t have to be complex and difficult to achieve, but it has to be the goal for any professional development initiative. Change can take on many forms and it is important to plan the type of change you are seeking. Reeves (2009) clarifies change as creating short-term wins that will sustain long-term change. This includes recognizing effective practices, simply and clearly throughout the year, and emphasizing effectiveness that makes the case for change compelling. Change also has to be seen as having moral or ethical imperatives instead of simply improving test scores.

The creation of the generic framework attempts to address the basic patterns of processes discussed while offering Reading Recovery professional development and build a new framework of professional development that could be offered beyond the confines of Reading Recovery as explained in Tables 4.18. – Pattern of Processes. There is no consensus on the best framework for continued professional development (Goals 2000), but it is agreed that a combination of approaches, ideas and techniques will help learning and growth in one’s chosen profession. It is, however; universally agreed that it is imperative to have an expectation of proficiency in certain basic processes (Costa and Kallick, 2009).

Following is a visual representation of the semi completed model with the differing levels of activity necessary to make learning possible. The use of this framework could possibly promote the development of a construct of knowledge in whatever field studied.
Figure 4.19. Framework – Professional Development Transformative Learning

It takes this process of transformative learning (Mezirow, 1991) to make change happen at the school level and to develop exemplary teachers (Pressley & Roehrig, 2005). This framework was conceived by studying the learning undertaken while part of a group studying to be Reading Recovery teachers. The true test of its efficacy is in the resultant degree of change in teacher attitudes towards theory, practice, and school culture, as intersected by critical reflection to form a personal construct of knowledge. The teachers within this study did change their personal subject construct by following a continuum of transformative learning over a period of time. Over the period of this study, I have attempted to link the learning and processes of professional development associated to Reading Recovery to a new framework that would also help teachers develop exemplary teaching practices.

Chapter 5, *Touching Solid Ground*, is a discussion of a compilation of lessons learned and proposed future research interests. This will all lead to formulating a conclusion about the learning undertaken by a group of teachers learning to be Reading Recovery teachers. As
part of that conclusion, a theory is proposed that contributes epistemologically to the formation of leadership in offering professional development.
Chapter 5

Touching Solid Ground

Summary

Within the 21st Century there has been a globalization of resources, technology, finance, and education (Jacobs (Ed), 2010). Many would argue that this has come about because of the death of distance, free movement of goods, fragmentation of production and the free movement of people (Zhao, 2009). This has severe consequences for individuals who are part of the world of education. The world of education involves all and any individuals who pertain to have an interest in the field of educating a future generation of children. What challenges will be faced by the world of education? How can students be prepared to meet the needs of a society that is on a continually fast-paced period of change?

The basic challenges in the field of education are multifaceted. These challenges include the provision of an education that helps individuals to secure a job to provide for themselves and their families, and to help them live and work while interacting with different cultures. Children must adopt a global view in education (Jacobs (Ed), 2010) where they develop into global citizens. If the education systems are to create global citizens to meet the future needs of a society, they must also develop a teaching fleet that will meet these needs. This, then also requires developing teachers into global citizens. That is the challenge for all individuals in the field of offering leadership in ongoing teacher professional development.

This study was a journey better described as an exercise in learning more about teacher professional development, and teacher learning in the 21st Century. The central tenant of this study was to investigate three areas of interest and answer three questions:

1. How do teachers learn?
2. Is there a transformative process in learning?
3. Is it possible to create a generic framework for professional development from the lessons learned?
It is the teachers’ journey through Reading Recovery professional development and their learning that led to the generic framework and the formation of a new theory on professional development. In applying what I had learned from the teachers’ learning, what I knew about Reading Recovery, and what I discovered about the current theories of learning and professional development, it appeared that the development of a new theory on professional development is appropriate. This theory is presented in Figure 4.19.

The original interests and questions led to the formation of other questions that would have to be garnered with an answer before concluding the story of three teachers involved in learning. I continually tried to build on my knowledge of learning and to remain true to a grounded theory approach that continues to build on my knowledge of professional development.

1. **What positive impact did professional development have on teacher’s educational practice and how is it linked to the new framework?**

   Within the study, it was shown that theory, practice and self knowledge changed over time with on-going professional development. This added tremendous value to the personal subject construct for each teacher, thus changing their practice in a positive manner. Learning by these teachers was examined, summarized and reported using the theoretical underpinnings of present day educational practices. It was determined that, with well-planned, ongoing professional development, learning is impacted in a positive manner. The change in teachers personal subject construct intimately changed their practice. These Reading Recovery teachers began the year with limited ability to self-analyze their opinions, their knowledge and their practice. Through a process of transformative learning undertaken with Reading Recovery professional development, they were able to change their personal subject construct of literacy. During the year they practiced observing, noting and explaining evidence of learning, which build on their knowledge about literacy theory. This enabled them to have a greater ability to look at their practice and learn from their own teaching. At
the end of the year, they were able to self-analyze with the help of the group or the Teacher Leader. This ability to self-analyze with the help of others within a professional learning community was necessary and part of the process for continued learning within their profession. A professional learning community is very important to the development of knowledge for teachers that will promote student learning. This group will continue over the years to develop an ability to self-analyze through ongoing Reading Recovery professional development. It is clearly evident that time is needed for teachers to transform and add to their personal subject construct. They spent 10 months in intensive, focused and scaffolded instruction, where, in my opinion, they reached the second level of learning. This learning was fostered by them being part of the Reading Recovery professional learning community.

Most school-based learning is fostered by teachers being part of an effective Professional Learning Community at the school level. With the comments taken from their self-assessment, all participants had increased their basic understandings of concepts relevant to teaching Reading Recovery by a range of 7.2% to 25% by the end of the year. It was encouraging to observe the change in their opinions, knowledge and practice over the period of the professional development.

The third level of processing, or the ability to be self-directed within their practice is not yet perfected. This was shown to be a difficult concept for these teachers as was evident from their change over time within their personal literacy constructs. They were still having a difficult time understanding action research, which at heart is a self-directed study. This fact was further solidified in the third term when some of the teachers voiced: “I don’t know what I learned.” Indicating that when left on their own it was difficult to analyze their own practice.

The following Table 5.1. *Analysis of Change over Time in Process Knowledge*, summarizes the process undertaken in their personal concept to how they developed the ability to self-analyze their knowledge about theory and practice.
Table 5.1.

**Summary – Analysis of Change over Time in Process Knowledge**

| Limited self-analysis and limited student data analysis | Term 1 |
| Analysis of evidence = observations = decisions       | Term 2 |
| Self-analysis – intermediate level that needs to be scaffolded | Term 3 |

The year began with teachers wanting me to “tell” them what to do and “how” to do their teaching. During the year, I had to weigh the benefits of revealing what the teachers must do within their practice, versus telling the teachers what to do. If there was a habit that I tried to avoid, it was dependence by the teachers. The goal, for the teachers, was for them to understand theory that was imbedded within their practice. Their ability to observe their students was necessary, and from those observations they were expected to verbalize the student’s learning. During the third term the teachers were realizing that without the knowledge of the theory, they couldn’t explain what behaviors were necessary for a literate student. They were just beginning to understand the theory, thus facilitating the process of verbalizing their observations of student behaviors. They practiced observing others through lesson study within the Reading Recovery Professional Learning Community. If they couldn’t verbalize their observations, they would have problems individualizing lessons to meet the needs of their students.

When studying a lesson or lessons, revealing a concept was important, to not set up a culture of total dependency on others. Teacher problem-solving was encouraged, when they were part of a group and also when they were faced with planning individualized lessons at their schools. There was an expectation that the teachers were committed to learning about product knowledge. Reading Recovery professional development was provided but the teachers had a tremendous responsibility to learn and they were expected to study.
The following Table 5.2. – *Summary, Analysis of Change over Time in Context Knowledge*, summarizes the process of the change in the teacher’s ability to observe literate behavior through an understanding of literacy theory.

**Table 5.2.**

*Summary-Analysis of Change over Time in Context Knowledge*

<table>
<thead>
<tr>
<th>“Telling” versus “revealing”</th>
<th>Term 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations – seeing and the ability to explain a behavior</td>
<td>Term 2</td>
</tr>
<tr>
<td>Without knowledge of theory – can’t teach</td>
<td>Term 3</td>
</tr>
<tr>
<td>Early years are important</td>
<td></td>
</tr>
</tbody>
</table>

Within the first term, teachers were concerned with the procedural and organizational aspects of the lessons. They wanted to know how to organize themselves, their space, etc., and what procedure to be used with their students. They were new to Reading Recovery and they were outside their comfort zone. Many indicated in their journal, that it was a scary process where they felt that they had no control and so little knowledge about how to teach children to read and write. As the year progressed, teachers were talking more about “why” things were happening and not only about “what” they should be doing within their lessons. Their language became more complex and they were able to verbalize what they should be seeing, observing and doing within their lessons. They practiced observing and then verbalizing the observations to clarify understandings.

During the third term, teachers began to better self-analyze their practice. This determined what they were seeing and then being able to explain it. Student assessment was daily and without expertise, they would not be able to inform their own practice. How can you comment on and assess something you know nothing about? An understanding had to be fostered and built around observing, assessing and then practicing what they had learned. Theory underpinned all understandings of the observable behaviors students were presenting to them.
Table 5.3., *Summary, Analysis of Change over Time in Content Knowledge*, summarizes the changes that came about in their practice over the 10 months of professional development.

**Table 5.3.**

*Summary – Analysis of Change over Time in Content Knowledge*

<table>
<thead>
<tr>
<th>Focus on procedural aspects of lesson</th>
<th>Term 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in complexity of language</td>
<td>Term 2</td>
</tr>
<tr>
<td>Building an understanding that theory underpins practice</td>
<td>Term 3</td>
</tr>
</tbody>
</table>

Within the confines of the Reading Recovery professional development framework (Pinnell, 1991) teachers transformed their learning. With the collection of conversations, observations and events, there was a possibility of studying their learning over time. An analysis of that data was undertaken, while considering the interests of this researcher in conducting this study.

Table 5.4., *Comparison – Content, Context and Process Knowledge, Change Over Time*, depicts the first term comparisons in types of learning taking place.
Table 5.4.
Comparison – Content, Context and Process Knowledge, Change over Time – First Term

<table>
<thead>
<tr>
<th>Content – Theory</th>
<th>Context – Practice</th>
<th>Process – Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Teacher Leader</td>
<td>Teacher</td>
</tr>
<tr>
<td>Reading and writing everyday</td>
<td>Focus on procedural aspects of lesson</td>
<td>Daily exposure</td>
</tr>
<tr>
<td>Word solving/ comprehension strategies</td>
<td></td>
<td>Directly taught</td>
</tr>
<tr>
<td>Guided practice – repeat</td>
<td></td>
<td>Mini/lesson – whole group</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
<td>Meeting area</td>
</tr>
<tr>
<td>Modeling and doing</td>
<td></td>
<td>Sharing time</td>
</tr>
<tr>
<td>Reading and writing a process</td>
<td></td>
<td>Demonstrate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Word list</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home reading program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

First Term

Content Knowledge

If compared, the analysis I did and the questionnaire completed by the teachers seemed to be indicating the same trend. Even if teachers were asked to comment on theory, they were more focused on procedural aspects of learning to read and write. It indicated that understanding of literacy theory was limited to items versus strategic activity.

Context Knowledge

Teachers indicated that “doing things” will enable children to learn to read and write. They are right, to a point, but when asked to comment on theoretical aspects of literacy they were not able to accomplish the task. It was evident that they would want to be told how to organize and what to teach the children in Reading Recovery.
Process Knowledge

All teachers felt that their knowledge about certain aspects that were important to Reading Recovery were lacking. Some teachers felt that they were at a greater disadvantage than others. This was indicated by how they rated themselves, percentage wise, with their knowledge. I indicated that there was a limited ability, at this time, to analyze student data to inform practice. At this time, they would not be able to answer the following question: What do you now need to learn? It would be easy to foster a culture of dependency rather than a culture of problem-solvers.

Third Term

During the third term, there was an expectancy that teachers would begin to see themselves as Reading Recovery professionals who could problem-solve difficult questions regarding their students’ needs in Reading Recovery. The following Table 5.5 - Comparison, Content, Context and Process Knowledge, Change over Time, depicts the third term comparisons.
Table 5.5.

*Comparison– Content, Context and Process Knowledge, Change over Time – Third Term*

<table>
<thead>
<tr>
<th>Content – Theory</th>
<th>Context – Practice</th>
<th>Process – Self</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher</strong></td>
<td><strong>Teacher</strong></td>
<td><strong>Teacher</strong></td>
</tr>
<tr>
<td><strong>Teacher Leader</strong></td>
<td><strong>Teacher Leader</strong></td>
<td><strong>Teacher Leader</strong></td>
</tr>
<tr>
<td><strong>Teacher</strong></td>
<td><strong>Teacher</strong></td>
<td><strong>Teacher</strong></td>
</tr>
<tr>
<td><strong>Teacher Leader</strong></td>
<td><strong>Teacher Leader</strong></td>
<td><strong>Teacher Leader</strong></td>
</tr>
<tr>
<td>75%</td>
<td>78%</td>
<td>78.5%</td>
</tr>
<tr>
<td>Self-analysis – intermediate level that needs to be scaffolded</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Content Knowledge**

Teachers are now commenting on processes that include reading and writing, and that strategic activity is important and necessary. An important fact is that the comment of “make meaning from the known.” They have to teach to bring meaning to the whole process for the
child. I clarify this as teachers building an understanding that literacy theory underpins their practice.

**Context Knowledge**

Teachers are now discussing activities that are going to promote literate behavior. They are discussing more than just “things to do,” but they are now aware that reading and writing is cross-curricular. The best way we may discuss reading and writing is to think of it as a way of life and not a subject to be compartmentalized. My comments are a reminder to us that practice is important but without the foundational work of theorists we would just plot a course of action with no valid benefit. There wouldn’t be a rationale for what is taught.

**Process Knowledge**

Teachers felt that their knowledge had increased over the year. The Teacher Leader was cognizant that the teachers were at the second level of learning, where they needed scaffolded instruction to increase literacy knowledge. Some teachers could develop into independent learners, but this group had not yet reached that level. They now understood the benefit of working within a group to study practice and theory. From this comes a change in attitude towards the whole process of learning. It’s recognized that all knowledge-acquiring is relevant to the present situation, and that it is not possible to know it all. Learning is a constant process. There were no feelings of inadequacy because it was built on a culture of inquiry and learning.

Their view of practice changed because their understanding of the underlying theory enabled them to rationalize their teaching decisions. They were also able to explain their practice and continue to build on their understanding of literate behavior. This enabled the teachers to bring meaning to the process, where they could observe the progress of their students. They were empowered to take chances, with scaffolded assistance in Reading Recovery and at the school level with the school improvement process. Over the year they learned to trust one another, increased their bank of knowledge and in the end their attitudes
on learning had changed, to include working to improve instruction through scaffolded learning.

The examination of their learning had been sub-divided into Content Knowledge, Context knowledge, and Process Knowledge, but in reality these three sources of knowledge must be seen as a part of the whole process. All three sources of knowledge are necessary to make effective changes to practice. These teachers have shown that their practice had changed over time. With continued professional development, these teachers have the potential to master the third level of learning, self-directed learning of a phenomenon. In subsequent years, they may choose to follow that path of professional development within their practice.

It was evident, throughout this research that teachers cannot learn in isolation. The process, procedures and supports must be imbedded into a much larger framework. A greater understanding of the pressures of implementing professional development must be sought to make lasting change a possibility. This led to the generation of the second question.

2. **What more has to be understood around teacher learning to implement quality professional development?**

After the proposition of the generic framework for professional development (see Figure 4.19.) it was realized that the journey of understanding and facilitating learning will continue to develop and evolve. It is important that any framework continue to evolve as educational theory evolves. It is apparent from some of the data collected that parental involvement and school organization to promote teacher and student learning continue to evolve and that will promote learning. There is also the issue of a greater need for the public at large to understand the complexities of teaching and learning in the 21st Century. With these considerations in mind, it was decided that the above question would help to drive forward future research on teacher professional development. It would also enable the
continued development of the generic framework for professional development (see Figure 4.19.).

So, to complete this part of the journey, answering the above question is necessary to continue to drive forward the development of a theory about professional development. As the question is general in nature, I decided that at least four areas of interest could qualify for further study.

The four areas deemed important that could entail further study are classified as:

1. Planners of professional development need to keep the public informed and involved.
2. Planners of professional development need to have a school environment conducive to learning.
3. Planners of professional development must call teachers to action, thus promoting self-fulfillment of educational goals.
4. Planners of professional development must make the process more overt.

These four considerations will be briefly explored as they relate to future research possibilities. It is recognized that this summary is offered as an enticement for future researchers to investigate these four areas. These four considerations for future research are discussed sequentially, but they don’t necessarily occur sequentially in practice.

1. Planners of professional development need to keep the public informed and involved.

This second statement involves the need to inform the public of the need for professional development. Reading Recovery’s attempted involvement (see Figure 4.15.) of parents or guardians in understanding and supporting their child’s growth as a reader and writer is important. As part of the implementation process of Reading Recovery, there are suggestions to involve some educational stakeholders. This group would involve parents, principals, board members and community members who hold an interest in educational matters. As Nova Scotia education is publically funded with an approximate budget of 30 million dollars (Nova Scotia Government budget, 2010), second only to health expenditures
within the province of Nova Scotia, this has to become an important process within the body of the professional development.

As such, another ripple to the framework could be added to make the public a serious consideration for future professional development planning initiatives. This circle would be classified as the public. This ripple should be added but because, at this time, it is an opinion offered by this researcher it will only be included on the fringes of the framework. It is recognized that more study must be done on the topic to tease out a process that would strengthen the generic professional development framework. Although reform efforts have changed expectations for teachers, the public perceptions do not seem to change. We could surmise that expectations for teachers have not changed because of the stakeholders’ own experiences in the public education system. They might assume that the system has remained static, and the system they knew is still the system in place. If we look at large industries, they have Public Relation departments. Within this time of great change, it should be a priority. The public’s perception of teachers’ work seems to exclude a notion that teachers must continue to learn within their profession. There has to be an understanding that a continuation of focused learning is necessary to remain current within one’s personal subject construct. Change cannot happen if all involved are not informed of why there is a need for change through professional development. Clay (1987) addressed the need for societal change when planning for effective professional development. She wrote about how all levels of a system must take responsibility for student’s learning.

So, the generic professional development framework could be updated so that the public perceives professional development as a valuable, necessary part of a well-functioning system. The Royal Academy of Engineering (2009) offers courses in public communications that tend to include communication strategies, media training, preparing a communication event, public perceptions, and how to prepare and analyze public opinion surveys. They have realized that successful change requires an informed populace that encourages and
understands the need for the change. In the field of education, there does not seem to be an
understanding of the importance of an informed public in understanding the face of education
in the 21st Century. Public policy which includes education is voted on by the public, so in
the field of education, I believe that having a population that understands the challenges of
teaching in this era is deemed necessary.

There are no more proposed ripples to add to the generic professional development
framework, but three other considerations remain that should be studied. This next
consideration will influence teachers’ attitudes towards professional development.

2. Planners of professional development need to have a school environment conducive to
learning.

In Chapter 3, some of the discussion (see Tables 3.13., 3.14., 3.15. and 3.8. -C)
revolved around the executive function of professional development. The executive function
of professional development was described as the overt and covert behaviors of adults that
lead to a metacognitive ability to self-analyze that drives forward learning. Critical thinking
skills, within the development of a personal subject construct, is the executive function of
professional development. These activities facilitate the building of or adding to the personal
subject construct. This is a necessity in the 21st Century that will continue to develop over
the years. There has to be a process in place at the school level that will advance teachers’
learning to the second level of learning (see Table 4.1). Living in Nova Scotia, one cannot
discuss professional development without considering the impact of the accreditation process.
Clay (1987), when implementing Reading Recovery understood the importance of advocating
for not only teacher change but she also realized the need for change at the school and
political levels. The goal of Nova Scotia School Accreditation (NSDOE, 2005) is on school
improvement at the school level that involves all the school population. It is essentially a
four (4) phase process where its main focus is on student learning that drives individual
teacher learning.
This generic model of professional development may not be applicable to all systems that don’t have a process at the school level that will encourage Professional Learning Communities for teachers to scaffold each other’s learning. In Nova Scotia, since this process presently exists, the framework could be applied. But, there seems to be a need for additional study on how the state, the district and the school fit into the development of their teaching personnel, especially metacognitive abilities to drive forward their own learning.

3. Planners of professional development must call to action teachers to promote self-fulfillment of education goals.

This third statement involves promoting and supporting metacognitive growth with teachers. Teachers have to effectively self-analyze their practice to drive forward their own practice. If the function of planners of professional developments is to promote learning, then part of that planning has to be to encourage teachers to continue to learn after formalized professional development ends. Teachers must continue to add to their own personal subject construct. Critical thinking has been determined to be the executive function (see Figure 3.7. - B) of any professional development initiative. Through the use of theory, practice and school culture, which is the foundation of a Professional Learning Community, planners of the professional development must give over some responsibility to the teachers to learn beyond formalized professional development. Teachers must develop a culture of professional responsibility towards their own learning.

Planners of professional development must practice using the covert and overt behaviors of learning (Manz & Sims, 1980) so that teachers learn to incorporate this type of learning within their everyday practice. Teachers must continue to flourish with help from others within the field. In Reading Recovery, teachers were encouraged to use the following self-evaluation questions, to think about their practice.

- What have I taught?
- What has the student learned?
• What have I learned?
• What do I now need to learn?

The following question should be added for all teachers to use within their learning:

• How will I learn what I need to learn?

In Table 3.11., the *Foundations of Learning*, teacher learning and professional development are discussed as the foundations of learning. The professional development was discussed as having three tiers and presented as stand alone, site-based, and self-directed. Teachers must bridge the three types of professional development and use them effectively at all levels to remain current in the 21st Century. So, it is proposed that more study must revolve around the school level to include lesson study (Brook, 2007) and the whole notion of lifelong learning (OLL, 2009 August 12).

The fourth, and last, considered topic of study involves teachers being more involved in the professional development process. It has to be a self fulfilling process, based on present needs. This means, in part, having the time to discuss practice with peers so that they may scaffold their own learning, and then practice what they have learned.

> 4. Planners of professional development must make the process more overt. Teachers need to study their lessons and be able to discuss the results.

Reading Recovery has a process in place to accommodate lesson study (Brook, M., 2009) within the teaching and learning process. There has to be a process in place that allows and facilitates a process of overt and covert dialogue about one’s own practice. This will facilitate and promote the executive function (see Table 3.19.) of professional development. Again, in Nova Scotia, the accreditation process (NSDOE, 2005) as a school improvement process is very important. Professional Learning Communities, as part of the function of the accreditation process, are an essential part of site-based learning. Even if there is a process in place, there are still perceived areas of weakness. An integral part of learning, beyond or as
part of a Professional Learning Community is the support of an educational coach or mentor. Teachers must share some professional responsibility, but they need a supportive environment that encourages learning.

In Reading Recovery, the professional development has a Teacher Leader who advocates for the teachers’ needs within the system. If education is a social activity (Vygotsky, 2009 September 13) teachers’ needs may be met in two ways. These two ways include working within a Professional Learning Community and/or working with a mentor. Working with a mentor would enable teachers to scaffold from a first to a second level of learning, or from a second to a third level of learning (see Table 4.22.). A mentor may aid teachers to be more self-directed in one part of their learning. This information then can inform and be discussed with other members of their Professional Learning Community. With the aid of a learning community and a mentor, a teacher may incorporate the four pillars of knowledge (see Table 3.12.) within their professional life to continue to take some responsibility for their own learning as part of their personal subject construct.

Reading Recovery teachers built on their personal construct of literacy through effective professional development that is supported state-wide, system-wide, and school-wide. Most importantly, the teachers are invested in their learning to bring the process together (Willis, 06, Lyons, 03, Brotherson, 2005). They have transformed their learning (see Table 4.1.) through supported professional development.

This study began with an inquiry into whether a professional development model may be created that would see the formation of exemplary teachers. The Reading Recovery teachers who were studying to teach Reading Recovery were followed for an academic year. The learning and processes were equated to a new framework based on current learning theories and processes of professional development. Their learning within the Reading Recovery staff development model of professional development was recorded, summarized and coded so that the information could be equated to present day theoretical ideologies.
This information was then transformed into a generic model of professional development that may see teachers develop into exemplary teachers. Table 5.6. – *Future Research Possibilities*, is a summary of the proposed future areas of study beyond the proposed generic framework that includes the state, system, school and individual. These areas of study could possibly strengthen the proposed generic framework for professional development.

**Table 5.6.**

*Future Research Possibilities*

<table>
<thead>
<tr>
<th>Framework</th>
<th>Future Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td>Policies</td>
</tr>
<tr>
<td></td>
<td>Policies – research, curriculum, etc.</td>
</tr>
<tr>
<td><strong>District</strong></td>
<td>P.D Framework</td>
</tr>
<tr>
<td></td>
<td>Know your audience</td>
</tr>
<tr>
<td></td>
<td>Personal Subject construct</td>
</tr>
<tr>
<td></td>
<td>Public relations</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td>Professional Learning</td>
</tr>
<tr>
<td></td>
<td>School Culture</td>
</tr>
<tr>
<td></td>
<td>Community</td>
</tr>
<tr>
<td></td>
<td>Mentor or Coach</td>
</tr>
<tr>
<td><strong>Individual</strong></td>
<td>Resources- Professional responsibility</td>
</tr>
<tr>
<td></td>
<td>Resources – Professional responsibility</td>
</tr>
</tbody>
</table>

**Conclusion**

Considering the limitations of this study and the critiques of Reading Recovery, it is felt that this study’s use of Reading Recovery learning and professional development has offered me an unusual lens to better understand teacher learning and professional development. If we are to believe that the essential learning outcomes are continuously expanding (Costa & Kallick, 2009) and are now more focused on problem-solving, then we must look to effective professional development that will engage the brain (see Figure 3.4.) so that learning will take place. Professional development needs to prepare teachers for wherever or whenever or whatever they are teaching. We must think globally, even though education is funded locally; we must make a priority the knowledge teachers will need to educate a future generation of globalized movers and thinkers. Clay (2005) described a child’s self-extending system in literacy as building a network or system that becomes smart enough to extend itself. Reading and writing then will improve whenever children read and
write, all toward a goal or level of independence. If we think of teachers and children
learning in a similar manner, it could be said that a teacher’s self-extending system includes
building a network or system that becomes smart enough to extend itself. A teacher’s
personal subject construct must continue to extend itself towards a level of independence
through system and personally planned continued professional development.

In looking back and reflecting on this journey, there has to be an attempt to lay bare
the learning achieved and the lessons learned throughout the whole process. The main reason
to undertake a study is to reflect and problem-solve, while working with others or as part of a
community of practice to improve the way an issue is addressed. Initially, the scope of the
research must be deemed to be ontologically viable. It should also add epistemologically to
the researcher’s base knowledge on the subject. It is also hoped that the study will interest
and inform others within the field of education.

This study, *Reflective Practitioners in the 21st Century*, was undertaken for me to
better understand a process of presenting effective teacher professional development at the
district level. Since my involvement in Reading Recovery professional development was
ongoing, it was a reasonable ontological point to begin the study. Throughout the process, it
was shown that Reading Recovery professional development was effective in adding to the
teachers’ personal subject construct. Once this was evident, it was possible to study the
learning within the professional development to determine the viability of it in other
professional development arenas. This study investigated the process of change while
involved in a process of teacher professional development. Then, the plan was to propose a
new framework derived from the theoretical underpinnings of the learning that took place
while learning to be a Reading Recovery teacher. The Generic Framework for Professional
Development (see Figure 5.1.) is offered as a means of planning professional development
that may develop teachers into reflective practitioners that are able to determine their own
needs in an ever changing world. It is understood that this framework will evolve with
changing educational theories. The public consideration is not added as a ripple because more research has to be completed as how it would impact the learning facilitated through the use of the framework. As previously mentioned, the public was added on the fringes of the framework to acknowledge that I consider it an important part of the process of offering teacher professional development.

Figure 5.1. A Generic Framework for Professional Development

Fullan (2006) with his publication of *The Change Puzzle*, clearly details the complex path of supports that must be implemented to effect change. He advocates that tri-level reform, at the centre, must be in place before lasting change will happen. This tri-level reform must be focused at the state, district and at the school level. Leadership within tri-level reform is considered central to effective change. In this case, leadership is defined (Fullan, 2006) as consisting of five key factors. Over the course of the development of the framework, it is evident that these five key factors may be linked to the generic framework proposed for professional development. The five key factors of leadership are listed as:

1. Understanding what must change.
2. Building relationships of trust.

3. Establishing coherence as a group.

4. Sharing the purpose of the change initiative.

5. Ultimately acquiring knowledge.

These five key factors proposed by Fullan (2006) can be linked to the generic framework for professional development. I can say that the linking helps to validate the generic framework as a possible process that will support the offering professional development. The end goal, in this case, is that a teacher may contribute productively to making change within their particular context. This research has underlined the fact that change is complex, and that it must take place at the state, district and school levels. Building relationships is also of utmost importance to establishing coherence within a group. Teachers need to make meaning of the process where they can be motivated (see Figure 3.4.) to learn. So, within the scope of this study it was important to understand how adults learn, and that there are some similarities between teachers and their students when considering the learning process. Any initiative should be knowledge-building and have positive changes on attitudes and practice at the school level. It is important for all educators to continue to learn and consider learning as a lifelong endeavor (OLL, 2009). It is therefore important for leadership at any level to have the ability and focus to build on a personal subject construct.

The goal in education is to have an educated population, but this cannot take place if teachers’ learning is not supported within the 21st Century. When Clay (1987) discussed implementing Reading Recovery, she understood that there were multi-level considerations needed to make lasting change in learning possible. This research project focused on the behavioral changes on the part of teachers and students. These behavioral changes by teachers and students were considered the end results. She advocated for organizational changes in schools and the need for social/political changes by the controlling authorities. She understood that these four dimensions must be in place to affect change in learning.
through professional development. The district has a central role to play within the change process. The district could be viewed as the catalyst of the change process. It is the mediator between the state and the school. This level of leadership must focus direction on initiative, plan appropriate strategies that enable the implementation of professional development, and in the end they must evaluate the process of the professional development. This would encourage, facilitate and enable the development of knowledge within the district that builds capacity focused on knowledge, skills and practices within the 21st Century. In undertaking this study, I was seeking to understand how to better plan effective teacher professional development within the 21st Century which would build on my personal subject construct. I have come to understand that change is a complex process (Fullan, 2006). It is a process that must include the state, the school, and the district in making lasting change. It has to be focused and ongoing. Fullan (1993) argues that teachers should be the roots for all change. With that argument in mind, it is appropriate to conclude this research with teachers’ comments voiced during Reading Recovery professional development. These teachers’ voices (see Appendix H) reinforce the notion that reflective practitioners within the 21st Century may change their beliefs, knowledge and practice through focused, relevant professional development.

If you don’t know, you will revert to how you were taught.

I now can defend what I say.

I am going to have to change my approach.

My understanding increases every time I see someone teach.

I continue to grow – progression of understandings.
Bibliography


Canadian Institute of Reading Recovery.(2008). Canadian norms for the observation survey, CIRR.
Canadian Institute of Reading Recovery (CIRR). (2007). Reading Recovery guidesheets, CIRR.


Innovation Configuration Map. (2005). National Staff Development Council (NSDC), Southwest Educational Development Laboratory, United States.


National Staff Development Council (NSDC) (2001). Standards for staff development, national staff development council, *South West Educational Development Laboratory*, United States.


O’Connor, E., YasiK, A. (2007). Using information from an early intervention program to enhance literacy goals on the IEP, Reading Psychology, 28:133-148


Schmoker, M. (2006). Results now, how we can achieve unprecedented improvements in teaching and learning, Virginia: ASCD.


Smith, F. (2006). Ourselves – why we are who we are, Lawrence Erlbaum Associates, Mahwah, New Jersey.


Stetsenko, A. (2008). From relational ontology to transformative activist stance on
development and learning: expanding Vygotsky’s project, Cultural Studies of Science

Stigler, J. (2000). Using video surveys to compare classrooms and teaching across cultures:
examples and lessons from the TIMSS video studies, Educational Psychology, 35(2):
87-100.

Strickland, D., Ganske, K., & Monroe, J. (2002). Supporting struggling readers and writers,
Toronto: Stenhouse.

must include change in teaching. Teaching and Change, 7(2): 107-111.


Teachers Must Become Change Agents. (1993). Educational Leadership, 50(6),
March.

The Canadian Education Association (CEA). (2007). At Issue, Glance at Weakness, Gaze at
Strengths, Winter, 47(1).

The Canadian Education Association (CEA). (1992). The first 100 years 1891-1991, Toronto,

The Department of Education and Training, (2005). Professional learning in effective schools
– the seven principles of highly effective professional learning, © State of Victoria,
Australia.

The Effectiveness of Early-intervention Tutoring Programs on Student Reading

The Fraser Institute. (2005). A Canada strong and free, Publication Catalogue, Volume 1
Retrieved from http://www.development@fraserinstitute.ca

Retrieved from http://www.development@fraserinstitute.ca

The Grounded Theory Institute (TGTI). (2010, April 16). Retrieved from
http://www.groundedtheory.com/

The History of Behaviorism, Cognitivism and Constructivism in Instructional Design. (2009,

The International Data Evaluation Center, (2010, June 25). Retrieved from
https://www.idecweb.us/

The Learning Points Associate™ group. (2011, June 8). Retrieved from
http://www.ncrel.org/sdrs/areas/issues/methods/assessment/a581k30.htm

The Royal Academy of Engineering. (2009). Public communication & applied ethics of


Zhao, Y. (2009). Catching up or leading the way – American education in the age of globalization, Virginia: ASCD.

Appendix A

Canadian Norms for the Observation Survey – June 2008
Developing Canadian Norms for an Observation Survey of Early Literacy Achievement

Sample Group and Assessment
The purpose of this study was to provide national norms for the Observation Survey (Clay, 2002, 2006).

The data for this summary consist of a random sample of first grade students from four provinces (Nova Scotia, Ontario, Prince Edward Island, Manitoba and the Yukon Territory. A total of 1,010 students were assessed by trained or in-training Reading Recovery teachers in schools implementing Reading Recovery. Teachers were advised to use the National Data Evaluation Center random selection process to select the two students for assessment. Students were eligible for selection in the sample if they were in grade one and were receiving their language arts instruction in English. Students were also eligible for the sample regardless of whether they were or would be receiving Reading Recovery or had been identified as having special learning needs. If the student left the school before the end of the year, the data that had been collected was used to develop the norms. No alternate students were selected.

At the beginning of the 2006-07 school year, Reading Recovery teachers each randomly selected two grade one students from their school. Each student was assessed at three points in the year using the six tasks in An Observation Survey of Early literacy Achievement (Clay, 2002, 2006). The first assessment period was set from September 8th to the 29th, 2006 during the first three weeks of the beginning of the school year, the second assessment period was January 22nd-February 16th, 2007 was set during the period of time which would have been the mid-point of the school year, and the third assessment period was June 1st – 22nd, 2007 within the last four weeks of the school year. The completed assessment sheets were sent to the Teacher Leader responsible for the implementation of Reading Recovery in the school, the sheets were checked for accuracy of scoring; the data entered on summary sheets and sent to the Trainer at the Western Canadian Institute of Reading Recovery for data entry, analysis and reporting. Canadian Norms for the Observation Survey – June 2008

Definitions

Summary Statistics
Measures of central tendency are designed to give us information about typical scores. Two such measures – the mean and the median each of which provides us with slightly different information. The mean, the measure of central tendency is the arithmetic average. of an individual’s true score. The SE is the standard error of the mean of all the observed scores. The second measure of central tendency, the median, specifies the midpoint of a set of scores.

The Standard Error (SE) is the statistic that allows us to use information about the reliability of a test to determine what the effect the error variance might have on our estimate. The Standard Deviation (SD) takes the mean as a reference point and provides an indication of the average distance between each score and the mean.
Stanine Groups

Stanine is a method of scaling test scores on a nine point standard scale with a mean of five (5) and a standard deviation of two (2). Raw scores are scaled to stanine scores by ranking the scores from the lowest to the highest and then by applying the following algorithm.

Approximately:
- 4% of the sample would be Stanine 1
- 8% of the sample would be Stanine 2
- 12% of the sample would be Stanine 3
- 16% of the sample would be Stanine 4
- 20% of the sample would be Stanine 5
- 16% of the sample would be Stanine 6
- 12% of the sample would be Stanine 7
- 8% of the sample would be Stanine 8
- 4% of the sample would be Stanine 9

See Teacher Leader Information Sheet: Stanines Canadian Norms for the Observation Survey– June 2008

<table>
<thead>
<tr>
<th>Letter Identification Stanine Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanine: 1</td>
</tr>
<tr>
<td>Fall: 0-23</td>
</tr>
<tr>
<td>Mid: 0-47</td>
</tr>
<tr>
<td>End: 0-50</td>
</tr>
</tbody>
</table>
**APPENDIX B**

**JUNE SELF ANALYSIS STRATEGIC ACTIVITY IN READING AND WRITING**

*At the end of a series of lessons and a child is ready to discontinue, what behaviors should we be seeing?*

**Reading**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluent and phrasing</td>
<td>The child must be self-monitoring on a regular continual basis.</td>
<td>Level 16 or better Using meaning, structure and visual cues to decode words</td>
<td>Should be able to break apart words</td>
</tr>
<tr>
<td>Independent problem solving</td>
<td>Must use meaning and structure to assist him or her with difficult text while at the same time using the visual cues at all times</td>
<td>Can break larger words into recognizable chunks</td>
<td>Look for known chunks (word families, etc.)</td>
</tr>
<tr>
<td>Use of all cueing systems</td>
<td>Should be comfortable at attempting difficult words while relying on the strategies he has learned and used during lessons</td>
<td>Self corrects with meaning and structure</td>
<td>Should be monitoring his reading using visual, structure and meaning (info)</td>
</tr>
<tr>
<td>Self-correcting</td>
<td>Phrased and fluent reading</td>
<td>Anticipates words Phrased/Fluent Comprehension</td>
<td>Should be able to identify when he has made an error and know how to correct it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fluency and phrasing</td>
</tr>
</tbody>
</table>
## Writing

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hearing and Recording Sounds independently</strong></td>
<td><strong>Should have a good control over problem solving.</strong></td>
<td><strong>40 words</strong></td>
<td><strong>Break apart words in writing</strong></td>
</tr>
<tr>
<td><strong>Composition of a story</strong></td>
<td><strong>Hearing the sounds in sequence</strong></td>
<td><strong>Knows word families/chunks</strong></td>
<td><strong>Know how to get to other words by knowing chunks</strong></td>
</tr>
<tr>
<td><strong>Asking for support only when needed</strong></td>
<td><strong>Large bank of written words</strong></td>
<td><strong>Composes more than one kind of sentence</strong></td>
<td><strong>Should be able to say the words slowly to hear and record sounds in a word</strong></td>
</tr>
<tr>
<td><strong>Using H/F word bank</strong></td>
<td><strong>Has enough independence that he does not wait to be helped</strong></td>
<td></td>
<td><strong>Should be able to punctuate and capitalize without prompts.</strong></td>
</tr>
<tr>
<td><strong>40 word vocabulary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Know how to get to other words from known words</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Risk taker</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Punctuate/capitalize without reminders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SELF-ASSESSMENT TOOL

**Area Assessed: Knowledge or Beliefs**

**SELF-EVALUATION**

1. **How familiar are you with the classroom implications and applications of:**

   a) Alternative assessment
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   b) Inclusion
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   c) Multiple intelligences
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   d) Action research
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   e) Constructivism
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   f) Higher-order thinking skills
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar

   g) Metacognition
   - Very familiar
   - Somewhat familiar
   - Heard the term
   - Unfamiliar
2. Which two of these processes or activities do you most want to learn more about?

________________________________________________________________________

________________________________________________________________________

3. Where or to whom in your school or district would you go to get the information you want?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4. What is your theory on how to teach reading and writing? (use another sheet of paper or the back of this form)
How do you teach reading and writing? Think about the following when formulating your answer.

<table>
<thead>
<tr>
<th>Organization of the classroom for teaching reading and writing.</th>
<th>Contents of the Classroom for teaching reading and writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence and use of technology for teaching reading and writing</td>
<td>Opportunities for students’ choice and initiative in reading and writing</td>
</tr>
<tr>
<td>Classroom management strategies for reading and writing</td>
<td>Classroom Climate for reading and writing</td>
</tr>
</tbody>
</table>

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Continue below and if necessary
Erica
The scale is scored by: VF = 4, SF = 3, HT = 2, UF = 1

First

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

22/28 = 78.5%

Beginning
VF – Multiple Intelligences, Metacognition
SF – Inclusion, Higher Order Thinking
HT – Action Research, Constructivism
UF – none

Second

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

24/29 = 85.7%

End

3) VF – Higher Order Thinking, Metacognition, Inclusion
2) SF – Alternative assessment, Multiple intelligences, Action Research, Constructivism
1) HT – none
1) UF – none

Nora

The scale is scored by: VF = 4, SF = 3, HT = 2, UF = 1

First

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18/28=64.3

Second

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22/28=76.3%
REFLECTIVE PRACTITIONERS

Kelton
The scale is scored by: VF = 4, SF = 3, HT = 2, UF = 1

First

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
</tr>
</tbody>
</table>

14/28=

Second

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
</tr>
</tbody>
</table>
### Opinions on how to teach Reading and Writing

#### Early

<table>
<thead>
<tr>
<th>Erica</th>
<th>Kelton</th>
<th>Nora</th>
</tr>
</thead>
<tbody>
<tr>
<td>R- Daily activities/sustained period /diff.genres of books/word solving/comprehension strategies/focused teaching/practice/strategies/automatic/mini lessons/whole group/scaffold extra help</td>
<td>Dolch list weekly testing/word wall daily review/home reading program/phonological activities/writing and reading morning news Word families/Active Young Readers</td>
<td>Organization-Writing Centre. Reading Center, Guided Reading Table, Groups Technology- listening center, computers, overheads Management – work in groups, follow routine, PEBS matrix Contents – book baskets, picture books, novels, charts, boxes of markers, crayons, paper, scissors, making words, guess the covered word, portfolios, self assessments, student writing samples Opportunities- student shave portfolios for writing and reading logs for reading/varied assignments with choice Climate-friendly, inviting, right to “pass”, respectful. Blocked amounts of time for reading and writing, model love of reading/writing</td>
</tr>
</tbody>
</table>

In Reading I choose book

#### Late

<table>
<thead>
<tr>
<th>Erica</th>
<th>Nora</th>
<th>Kelton</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflective Practitioners</td>
<td>Teaching from known/daily/connections/reciprocal/model/fluency/strategies</td>
<td>Have a wide selection of books at various levels</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>R-letters/sounds/wds within a larger text-not in isolation/make sense/structure/letters/words and hear sounds/practice/predictable/exposure/visual becomes known/ R+W taught daily/strategies</td>
<td>W-composing/ownership/real/purpose/diff. Genres/change with genres/ R+W linked/integrated across subjects/relevant/authentic</td>
<td>Time for personal reading</td>
</tr>
<tr>
<td>Beyond level 3 they choose the book</td>
<td>Reading workshop-listen to story- talk about a particular reading strategy – practice strategy- discuss where they could use strategy-</td>
<td>Read to the class-model</td>
</tr>
<tr>
<td>W- everyday, some days integrated into content, Mini lessons on writing – hear sounds, spelling, high frequency words, word wall, theme, Writing folder, share writing</td>
<td>Work collectively with older students – organization</td>
<td>Encourage students to write own ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Try to make connection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(I don’t have much experience with the use of technology for teaching reading and writing as it may apply to listening centers.)</td>
</tr>
</tbody>
</table>
# REFLECTIVE PRACTITIONERS

## Theory of Teaching Reading and Writing Early

<table>
<thead>
<tr>
<th>Erica</th>
<th>Nora</th>
<th>Kelton</th>
</tr>
</thead>
<tbody>
<tr>
<td>R+W activities every day – sustained period</td>
<td>Students learn by modeling and doing</td>
<td>Didn’t give it much thought</td>
</tr>
<tr>
<td>Exposure to different genres</td>
<td>Reading and writing is a process and students learn at their own developmental level.</td>
<td>My educ. Was in upper elementary.</td>
</tr>
<tr>
<td>Taught various word solving and comprehension strategies</td>
<td></td>
<td>Assumed they knew how to read.</td>
</tr>
<tr>
<td>Teaching directly to the students</td>
<td></td>
<td>Provide alternative materials that could “fix” the problem</td>
</tr>
<tr>
<td>Repeated practice using strategies – becoming automatic</td>
<td></td>
<td>Resource teacher’s problem</td>
</tr>
<tr>
<td>Mini – lessons</td>
<td></td>
<td>How to do it? I didn’t know</td>
</tr>
<tr>
<td>Whole group learning</td>
<td></td>
<td>Read with children at a young age</td>
</tr>
<tr>
<td>Independent practice</td>
<td></td>
<td>No control over what other parents did with their children</td>
</tr>
<tr>
<td>Scaffold learning</td>
<td></td>
<td>The Later they were introduced to literacy the less likely they would be to excel</td>
</tr>
<tr>
<td>Small group sessions for extra help</td>
<td></td>
<td>The more you read and write the better you get at it.</td>
</tr>
<tr>
<td>Predictive texts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W – Taught in a similar way as R.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to different types of writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make the connection between R+W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to seven traits in writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraged to attempt no matter how small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop confidence in themselves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities to practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

Theory of Teaching Reading and Writing
Late

<table>
<thead>
<tr>
<th>Erica</th>
<th>Nora</th>
<th>Kelton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of topics that they want to read+W.</td>
<td>Teaching from the known is crucial.</td>
<td>Don’t know if I have one</td>
</tr>
<tr>
<td>Sense of ownership and makes it “real”</td>
<td>Daily reading and connecting writing.</td>
<td>Now know that it is my responsibility to teach R and W.</td>
</tr>
<tr>
<td>Children need a purpose for R+W</td>
<td>Modeling fluency</td>
<td>P-12 have to be taught literacy skills</td>
</tr>
<tr>
<td>Need to understand there are various R+W genres</td>
<td>Reinforcing strategies.</td>
<td>Now a better understanding:</td>
</tr>
<tr>
<td>Understand that genre changes the way you read the book</td>
<td></td>
<td>Reading and Writing are not separate-mutually supportive.</td>
</tr>
<tr>
<td>Understand that R+W are linked</td>
<td></td>
<td>Better reading skills promote better writing and vice versa.</td>
</tr>
<tr>
<td>R+W need to be integrated across curriculum</td>
<td></td>
<td>Although a bank of sight-word is very impt reading, decoding and learning new words are best learned in context. Learning list of words with no meaning attached to them may work for the child who is a natural reader, but I doubt words for the majority. We learned to speak by being immersed in the language, learning how the words worked and adjusting that knowledge as new info came along. R+W should work the same way.</td>
</tr>
<tr>
<td>Relevant and authentic</td>
<td></td>
<td>The reading learner should be able to feel that he/she is in a safe environment (Emotional)</td>
</tr>
<tr>
<td>Taught letters, sounds and words within a larger text</td>
<td></td>
<td>Learning to R+W doesn’t end in elementary school</td>
</tr>
<tr>
<td>Not in isolation</td>
<td></td>
<td>I can’t assume as a teacher, that the student is going to make the connections to new text the same way I do</td>
</tr>
<tr>
<td>Need to make sense of structure and visually see it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See the letter/words and hear the sounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple exposure to words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R+W taught daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies are reinforced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

APPENDIX E

YEAR END EVALUATION

Reading Recovery® 2008 – 2009

Comment of the effectiveness of the in-service sessions, the school visits, the teacher leader, the logistics and the social interaction.

1. In-service session
   - Very beneficial
   - Opportunity to share
   - Learn from others
   - Videotape allowed one to look critically at improving as a teacher.
   - Video in particular was the most effective way to reflect on my learning and teaching.
   - Sessions were crucial to my learning
   - Most successful sessions were as a whole group
   - Feedback was always intended to help me in my teaching
   - To talk about problems
   - Getting together during the day
   - Learning is authentic

2. School visits
   - Positive
   - Focused suggestions for improvement
   - School visits very effective
   - Very helpful
   - They were never threatening and the follow-up was always positive, supportive and helpful

3. Teacher leader
   - Was not judgmental and was flexible.
   - Very easy to talk to and offered as much support as she could throughout the year.

4. Logistics

5. Social Interaction

What are the (1) advantages and (2) disadvantages of the model of professional development used in Reading Recovery®?

Advantages
   - Interact with other teachers
   - Observed in our own schools
   - Others can see how our students are in a natural setting
   - Behind the glass, we get to have discussions.
   - Networking, teachers P-2 especially would benefit from this training.
   - Interaction
   - The method of learning a part and field testing that part first is more rewarding
   - Trust
   - Gained the experience

6. Disadvantages
   - The time I miss with my classroom, but the advantages far outweigh…
REFLECTIVE PRACTITIONERS

– You are isolated in one school and often question your teaching without being able to consult.
– No suggestions

What changes, if any, do you feel need to be made to Reading Recovery®? What do you feel could be done differently to better serve the teachers and the students?

– More time behind the glass
– Need more time to concentrate on the huge amount of paperwork.
– I can’t think of any

Strongly Agree – SA
Agree – A
Unsure – U
Disagree – D
Disagree Strongly – DS

Teacher Leader

Teacher leader is knowledgeable about the subject
Teacher leader answers teacher’s questions

**Assignments**

The readings facilitated understanding of the course material.

The assigned readings complemented teacher leader’s emphasis during sessions.

Amount of required reading was reasonable.
REFLECTIVE PRACTITIONERS

Teacher Leader Visits

Visits were effective

The number of visits during the year was reasonable.

Visits expanded my knowledge of the procedures.
APPENDIX F
Innovation Configuration Map

Teacher Opinions, October 2008

Context

The Teacher: Part of a learning community

Outcome 1.1 Meets regularly with colleagues during the school day to plan instruction which includes Reading Recovery®

Outcome 1.2 aligns Reading Recovery® work with school improvement goals (Accreditation)
REFLECTIVE PRACTITIONERS

Outcome 1.3 Participates in varied learning teams, some of whose membership extends beyond Reading Recovery®

Leadership – The Teacher

Outcome 2.1 Participates in instructional leadership development experiences.
REFLECTIVE PRACTITIONERS

Outcome 2.2-Serves in a variety of instructional leadership roles.

Outcome 2.3  Contributes to the planning of school-based professional learning which includes Reading Recovery®.
Outcome 2.4  Articulates the intended results of Reading Recovery® PD on teacher practice.

Outcome 2.6- Articulates the benefits of professional learning
REFLECTIVE PRACTITIONERS

CONTEXT

Resources

Outcome 3.1-Participates in Reading Recovery® professional development during the workday.

Outcome 3.2-Accesses funds to support Reading Recovery® learning priorities
Outcome 3.3 - Receives external and internal support related to Reading Recovery® learning priorities.
Outcome 4.1 analyzes disaggregated student Reading Recovery® data to identify adult learning priorities at the classroom, school, and regional levels.

Outcome 4.2 Analyzes a variety of disaggregated data to identify learning needs of Reading Recovery® professionals.
REFLECTIVE PRACTITIONERS

Outcome 4.3  Works with colleagues to use disaggregated data to establish Reading Recovery® professional learning goals.

Outcome 4.4  Analyzes relevant student data in order to monitor and revise Reading Recovery® improvement strategies.
REFLECTIVE PRACTITIONERS

PROCESS

Evaluation

Outcome 5.1—Contributes a variety of data to evaluate the impact of Reading Recovery professional development

Outcome 5.2—Collects and analyzes data to determine the impact of PD.
REFLECTIVE PRACTITIONERS

PROCESS

Research-based

Outcome 6.1-Use educational research when making Reading Recovery® Instructional decisions.

![Bar chart showing the frequency of participants reporting different levels of research-based decision-making.]

PROCESS

Design

Outcome 7.1 Participates in a variety of appropriate staff development designs aligned with expected improvement outcomes.

![Bar chart showing the frequency of participants reporting different levels of staff development participation.]

Outcome 7.2 Participates in long-term and in-depth professional learning.

Outcome 7.3 Implements new practices as a result of follow-up sessions.
Outcome 7.4 Uses technology as a component of Reading Recovery® professional learning when appropriate.

PROCESS

Learning

Outcome 8.1 Participates in Reading Recovery® professional development that mirrors expected instructional methods.
Outcome 8.2- Participates in Reading Recovery® learning that impacts depth of understanding.

Outcome 8.3  Participates in a variety of professional development experiences appropriate to career stage.
Outcome 8.4- Engages in Reading Recovery® professional development that considers participant concerns about new practices.

PROCESS

Collaboration

Outcome 9.1  Participates in a Reading Recovery® culture that is characterized by collegiality and shared responsibility.
Outcome 9.2 Develops knowledge about effective group process.

Outcome 9.3-Collaborates successfully with colleagues.
REFLECTIVE PRACTITIONERS

Outcome 9.4 – Uses effective conflict management skills with colleagues.

![Bar Chart]

Outcome 9.5- Uses technology to support collegial interactions.

![Bar Chart]
REFLECTIVE PRACTITIONERS

CONTENT

Equity

Outcome 10.1 – analyzes the impact of attitude, background, culture and social class on the teaching process.

Outcome 10.2 Develops skills that communicate high expectations for each student.
REFLECTIVE PRACTITIONERS

Outcome 10.3- Establishes a learning environment that is emotionally and physically safe.

Outcome 10.4  Demonstrates respect and appreciation for students and families and for their cultural backgrounds.
REFLECTIVE PRACTITIONERS

CONTENT

Quality Teaching

Outcome 11.1 - Demonstrates a deep understanding of subject matter that helps students to meet rigorous standards.

Outcome 11.2 - Uses appropriate instructional strategies that help students meet rigorous standards.
REFLECTIVE PRACTITIONERS

Outcome 11.3- Uses various classroom assessment strategies to monitor student progress toward meeting standards.

CONTENT

Family Involvement

Outcome 12.1 Develops partnerships with families and other community stakeholders.
Outcome 12.2 Implements strategies to increase family and caregiver involvement.

Outcome 12.3 Uses technology to increase communication between school and home about student learning. (Reading Recovery®)
APPENDIX G
ANALYSIS OF CASE STUDY

Erica May 9, 2009

Reading

![Graph showing Reading percentage over four weeks with lower and upper ranges.]

Self-Corrections

![Graph showing Self-Corrections percentage over four weeks with analogy.]

Analogy
REFLECTIVE PRACTITIONERS

Breaking

Writing

Words worked on in writing
REFLECTIVE PRACTITIONERS

Hearing and Recording Sounds

Words to Fluency
Wants to teach reading by using more visual information

She learned that she couldn’t forget about meaning structure – orchestration

Important that he says and listens to himself say words slowly

Needs to teach the child to use analogy. Not to only focus on knowing a word. Not practical for problem solving.

Learning to search effectively to S/C

Needs more practice saying words slowly from left to right. Independence

“He hears me then he has to say them slowly”

S/M in reading and writing. Repeats for fluency and comprehension.

Has to know much more about how words work. Using known words to get to unknown.

More evidence of orchestration of m/st/v information on the run.

Her issue is that student effectively uses visual information.
In reading she words on breaking – how words work – but she could carry it further by using more analogy. Using what child knows to get to unknown. (TWA in reading)

Wants him to say words slowly to be able to problem solve. This is a hard task that must be turned over to the child. She comments:” He hears me then he has to say them (wds) slowly.” He is depending on her. He should say it slowly alone (independence)

She is using the task but I feel that she hasn’t given the means to the child for independence. She says – “needs more practice saying words slowly from left to right.”

“Knows much more about how words work”. In reading works on Breaking in writing words on H/R/W, Fluency, Analogy. (Reciprocal)

But she adds that “not forget” about meaning and structure so child can orchestrate information and retain meaning/comp.

Independence problem solving on the run on new words where the meaning is retained.
REFLECTIVE PRACTITIONERS
Nora May 9th, 2009

Reading

Writing – Words written
REFLECTIVE PRACTITIONERS

Breaking

Reading
REFLECTIVE PRACTITIONERS

HR Sounds in Words

Analysis

- Needs to work on reading fluency – the child is not orchestrating m, st, and v information.
- Need to work on getting to new words from the known (analogy)
- Need to get child to focus on entire word – B, M, End.
- Need to ask: Are you listening to yourself? Did it sound good? Problem of orchestration
- Endings – composition – starting to take risks in writing.
- He is not appealing to me (verbal) for unknown words, he looks to me and I say “Would
REFLECTIVE PRACTITIONERS

you like for me to tell you? (He just changed tactics and now is appealing through a look)

• letter boxes – B, M, and End – confidence

• Needs to learn to bring his finger back in only when he needs to find his place.

• His weakness appears in reading when he is asked to solve unknown words.

• Writing – He continues to randomly guess letters.

• Needs to work on fluency. If he is not fluent, what does that mean? Slow processing of visual information, not problem solving effectively (because of word work)

• Needs to work on getting to unknown words from known. Where does she have to work on this during lesson? Need to get child to work on whole word. This would be helped with HR Sounds and Breaking. Doing a slow check.

• He is not appealing to me”… but he is appealing because he sits and waits. Independence and it all comes to word work, m and st won’t carry him.

• She is working on all aspects of word work but she is not helping the child make the connection between R + W. Has to spend more time on analogy in Writing and linking it to the work in Reading.
Reading %

Self-Correction Range Per Week
REFLECTIVE PRACTITIONERS

Analogy in Reading

![Analogy Chart]

Breaking in Reading

![Breaking Chart]
REFLECTIVE PRACTITIONERS

Writing

Worked on Words in Writing

![Bar chart showing Words in Writing across different weeks]

Hearing and Recording Sounds in Words

![Bar chart showing Words across different weeks]
Words to Fluency

![Graph showing Words to Fluency across weeks](image)

Analogy

![Graph showing Analogy across weeks](image)

Analysis

- # of lessons a problem
- Needs to go from known to unknown words
- HR Sounds needs more work
- Paying more attention to print. Starting to listen to himself.
REFLECTIVE PRACTITIONERS

• RR is a snap shot in time. “To make only one error on Monday and then make 7 the next day, shows this.”

• Noticing endings. “He has also noticed that some larger words contain smaller words that he knows”. He may not realize it yet, but if he sees the same word often enough and its impot to him, he will have a good visual image in his head. (Practice-reciprocal)

• Missed 2 opportunities to write…children can get “too comfortable” with you and try to take some liberties. (Management) I got him back on his game within the week using my experience from 1st round.

• He can do it (more confidence) Nora is learning to use sound boxes to attempt words. “He’s hearing sounds in order with more consistency. He would often hear the last letter and write it down first. He is also expanding his knowledge of suffixes …noticed more frequency.

• Use of elconan boxes. Forces the child to listen for independent sound. Helps to reinforce L-R directionality.

• Greater understanding of how words work – leaving spaces. Starting to go from known to unknown (end-friend)

• Keep in mind that meaning and structure must be maintained. “I didn’t realize completely how new readers don’t just compensate for these (dropped suffixes) in the flow of the sentence.

• “RR is a snapshot in time…” Tells me that child is using memory and not problem solving.

• “he may not realize it yet…” This is the reason why we practice words (Fluency). Can’t only depend on this – has to problem solve.

• Kelton is weaker in R voc. Than in writing. Hasn’t gone from K to UK in R. Means that not enough reciprocal in R+W

• Management
REFLECTIVE PRACTITIONERS

- Hearing sounds in order with more consistency. Has to problem solve from L to R.  
  “Forces the child to listen…”
- “Starting to go from known to unknown…”
- “I didn’t realize how new readers don’t just compensate for these…”
- Has to make more of an effort to reinforce reciprocal nature of problem solving words.
Conversations after sessions

Conversations: June 2\textsuperscript{nd}, 2009

Process

Term 3

Organization

• It takes a tremendous amount of time to reflect and form your practice. Use this as evidence of why we should have more time added on to our assignment.

Theory

• Good base
• I thought it would come naturally and it doesn’t necessarily come naturally.
• RR assessment is a snapshot in time

Observation

• I had to think of what I had learned
• I need to learn this to be able to do that
• He has accelerated so much in R, now I have to go back and focus on words
• Need more time
• Working hard
• Learn by making Bo, Boe’s
• I got a deeper realization on the sound boxes and they really work quite nicely.
• The need for instant gratification made my students resist longer texts
• When writing she is using familiar words
• At times things taught are forgotten.

Practice

• Assessment
• Formative and summative
• Hard
• Process
• Looking at me and waits
• Be own audience
• Time-miss opp. To get some writing in
REFLECTIVE PRACTITIONERS

- Try it – evaluate results – make a decisions

Content

- What beh. Should we be seeing at the end of a series of lessons?
- Think
- Learned
- What can child do in R + W
- Evidence
- Solve using strategies
- Problem Solving, Self-Correcting, Monitor
- M, st, v infor
- Sound of Reading
- Verify what I know
- Construct
- Conversation-compose
- Break apart words in writing analogy
- We have to do more on studying vocabulary
- How do you get child to study a word – to know a word?
- Risk taker
- Scaffolding
- Change over time
- Capitalize and punctuate
- Put up an editing reminder on wall
- Up in reading has issues in Writing
- Knowing the word –How to learn it – Practiced H/R/S – Has worked on word

- Independence – internalize
- What have I taught today
- Look
- Focus of lesson
- Modeled
- Articulate slowly
- Benefit her
- See progression
- Writing vocabulary
- He has learned
- You could see it build
REFLECTIVE PRACTITIONERS

- Focus on building unknown vocabulary
- Bits and pieces of what I have learned.
- Fluency
- Structure – not structure but monitoring
- What are R + W?
- Did the vocabulary increase?
- No transference
- Connection
- Read out loud–Maybe they have to – to hear themselves
- Starting using sound boxes (Elkonin boxes)
- Forces child to listen to ind. Sounds in wds. Instead of trying to remember the letters.
- Comprehension
- I assumed
- Prompting
- Independence
- Strategies
- Transfer it to class
- Strategies
- Push him to go faster
- Without a lot of dialogue
- Finish the book-the story is important
- Make connections to her writing
- Check all sources of information
- predict
- breaking
- Taking Words Apart – looking – reread – S/C
- Doesn’t make sense
- Analogy – endings – make links

Context

- I don’t know what I learned. That is the hard part!
- Meant to make you think
- The hard part came when I had to analyze
- As a teacher you have to be able to do this – articulate evidence
- What has you child learned?
- What are you going to teach tomorrow?
REFLECTIVE PRACTITIONERS

- What have you learned?
- What do you now need to learn?
- Life-long learning
- Reflect on
- Evidence
- Where do I need to go?
- More of what I need to teach him
- I should take more chances on how I go about teaching. I will never know what could have been possible.
REFLECTIVE PRACTITIONERS

Conversations: May 19th
Process

Organization

Theory
- Learn the sound boxes
- practicing

Observation
- think about the progress
- self-analysis
- You teach to the learner

Practice
- purpose
- description
- summarize
- Need to have the experience of discontinuing
- We don’t penalize
- Go back
- Pick up on little cues
- Take control
- Model
- Hesitant – loosing meaning

Content
- change over time
- self-evaluation
- hard to accelerate plan
- recommendation to discontinue
- Writing vocabulary – independence
- Monitors for meaning/structure and visual information to problem solve
- At times will neglect meaning and has to be prompted quite a bit for him to gather that meaning
- Teaching points
- Independence in writing
REFLECTIVE PRACTITIONERS

- I felt like I was stopping him from writing
- Work hard
- Breaking words where needed – relevant
- Reading so word for word
- Not anticipating
- Idea that every word is known
- Emotion – panic
- Focused on item knowledge
- Still focused on knowing all words
- Needs to bring in structure and visual
- Needs to visually process
- Cut up sentence
- Phrasing and fluency
- Builds fluency
- Writing – model – progress
- Scaffold
- Assessment
- Self extending system – what is it?

Context

- Not learning how to teach children at higher levels
- Self-assessment
- Journal – What have I taught today? What do I need to teach today? What do I need to learn? What have I learned? Like the prompts…you need to get this in your head.
- Concentrate on positive strengths. Something I learned this year is to go from positive
- Knowing her student. Someone doing RR and child come back to classroom. I wouldn’t have a clue. The benefits are there of knowing the child.
- Have to be given time.
- Administrative time
- Play duties off one another. You don’t have enough time to do everything.
- I wondered what else I could have done.
- This means that in Grade 2 that teacher should be reinforcing the same strategies.
- Need for early years PD
REFLECTIVE PRACTITIONERS

Conversations: April 5th
Process

Organization

Theory
- Observation survey
- Different variables
- At risk
- Summative vs Formative
Observation
- Observe change

Practice
- If they would go back and reread it is all there – time the issue

Content
- Theoretical background
- Practice
- Orchestrate
- Theoretical rationales of observation survey – classroom teachers
- Some part of the survey I am still not comfortable with
- Time an issue
- Differentiation
- We need to speak the same language
- Knowledge and thinking = change
- Practice
- Standardized tests – what are there functions?
- Re-reading + practice + rereading = understanding
- Make sense now
- Thought that R+W were two separate things
- General knowledge (background) is important constructs our meaning
- Seeing print from two vantage points about R+W.
- Learners should improve whenever they R and W
- Early behaviours- what is a story? Make sense?
REFLECTIVE PRACTITIONERS

Context

- Discontinued at Level 16 but hadn’t made any more progress since then
- Very little R and W going on in their lives
- Bridge that gap from RR to Grade 2
- Obs. Survey – would take about an hour to admin.
- For classroom – target the children who you don’t know – at risk
- Evidence – What do you know? What do I have to teach
- Who can help?
- Need help – teachers
- Have to take teaching further
- Value what is known, but then teach
- Learn
- Look at different ways
- Lots of teachers who don’t understand how to teach reading and writing.
- Co-teaching/build relationships in school/little at a time/feedback
- Learning is social
- Constructivism
- Professional Learning communities – book studies – social network – working together for the betterment of student progress
- It is the best PD you can have
- Book study on RR?
- The whole notion of PD for teachers depends a lot on background knowledge but also our way of teaching is determined by how we were taught. We can be taught theory when we come back to classroom we revert to how we were taught.
- If you don’t know any better you will revert to the known
- I think we have to focus on early years
- What is reading? Ask your RR kids, why do you read? …It’s never I like to read
REFLECTIVE PRACTITIONERS

Conversations: June 2\textsuperscript{nd}, 2009

Process

Organization

Theory

Observation

- Look at where you were at ..at the beginning and at the end of your RR PD sessions.
- Didn't know at first at end ran out of ink.

Practice

- Alternative assessments-finding as many diff. ways to assess as possible. Formative and Summative – day to day and end of year
- Action research

Content

- The ability to think on own and problem solve
- Concentrate on all the positive
- Meaning is the overlying thing

(I was disappointed that the group did not mention that: the use of m, st and visual info to monitor, search, S/C and problem solve and continue to read.)

Context

- Theory of how to teach R+W
- Never really stopped to think about how they learned to read.
- Just thought that they should know how to read
- Not something that was directly taught to us
- Assumed
- Never really thought about why.
- Teaching letters in isolation. I don’t do that now.
- Taught daily
- Progression of understandings
- Continue to grow in understandings
- Purpose
- Writing – different genres – diff aspects of writing
- I didn’t know how they learned to R+W. They just did.
- Initial brief, now elaborate
- Could defend what I wanted to say
Conversations: April 3rd, 2009

Process

Organization

- Code it

Theory

- Prompting – A call to action –
- Assessment – summative and formative
- Formative assessment in RR
- Observation survey – summative
- RR – assessment to know where you are going in your teaching
- Drives your teaching
- Formative – RR, lesson record
- Looking
- Reading fast fluent – pace
- What I have to do for you to increase your learning? Reflect on your learning. Reflect of your students learning.

Observation

- This work is challenging
- Student relying on me
- Pressed for time
- Hurry
- Take away your voice
REFLECTIVE PRACTITIONERS

Practice

- Her way of teaching is reflected on this little guy
- Always pressed for time…when you rush you take control
- Communicate
- Fully engaged
- Change

Content

- Watch yourself on a video of your lesson.
- He is getting the reading up but the writing “not at all”
- Asking “how is he doing”? Gather information from teacher
- Inform your teaching
- Observation and recording
- Modification
- It drives our daily instruction
- Communicator – Interrogator – Directed-Misdirected
- Predisposed/habit
- Ask myself a lot of “W” questions
- Attack a problem/the logical assumption
- If it’s right for me that it is right for others. Try to impart that same line of reasoning on others
- Go where I want you to go (influence your decision)
- I try not to start conversations – participate
- I think that I am all of them
- A continuum?
- Direct
- Students – misdirected? Modulate that back into..try to derail
- Coping mechanism?
- Independence – problem solved/self-directed – risk taker
- Punctuation
- Prompting
- Telling him
- Tactile
- Breaking
- Composition – a lot of time on writing
REFLECTIVE PRACTITIONERS

- Working on words – say the wd slowly to hear himself..say it …listening to themselves…saying it slowly because they can hear themselves…translate into letter and be able to put it down.
- You say it! It wants you to hear yourself say it and he didn’t want to do it.
- Start from beginning – depended on me – got into habit
- Prompts – internalize
- Writing seems to be an issue
- Work has to be meaningful
- Interdependence?
- Remember/practice/show him/orchestrated
- The words
- Talking a great deal
- Verbalize
- Control over to him

Context

- How does this translate to classroom?
- Discuss with teacher – conversation daily – specific in your communications
- Sharpens my teaching of students outside of RR.
- Think about doing some mental notes on some children – what worked/what didn’t
- I am going to have to change my approach. I get to the middle of unit and it falls apart.
- In the classroom it is continuous and on going
- I just have a piece of paper-it is blocked off with names – it can be done quickly
- What have you learned about yourself as a communicator?
REFLECTIVE PRACTITIONERS

Conversations: April 1st, 2009

Process

Organization

Theory

- I said no to him, but I should have said: You said. Round makes sense … What would you expect to see?
- Memorizing it?
- Know the concept – reason?
- Learning is a social activity. Need to socially spend time with them – reading and writing with them. Constructivism

Observation

- Parents involvement
- Guessing?
- Processing so slow
- Not typical of him
- Trying to memorize everything
- If you could see his eyes – if we could map where their eyes go it would be fantastic
- We teach from our assumptions about how children learn.

Practice

- Missed lessons
- Regret
- What is slowing him down?
- He needs more practice. I just had 2 lessons.
- I love that we are critiquing so much from a lesson.
- Teacher journal – self analysis
- Focus on the writing part of the lesson
- Disconnect – not processing

Content

- My understandings increase every time I see someone teach
- Share what I have learned
- The reciprocal nature of H/R sounds in words in writing and TWA in reading
- Transfer
- Hear, process and record on their own
- A slow check of the word
REFLECTIVE PRACTITIONERS

- Processing – listen, process and write
- Bring that together
- He went back and did a slow check
- Transference
- He does it in R and W
- Prompts to confirm
- What does it mean to problem solve in reading? What do you see? What is your evidence? What does it mean to problem solve in W?
- What did you teach today?
- What are you going to teach today?
- Go back-look-problem solve
- Analyze – will refocus your teaching
- Process
- Strategic Activity – orchestrate/TWA?HRS?Taking words to fluency/Analogy/bring all of this into the equation
- I keep saying “you know” because I am trying to relate it to what he knows
- Prompted for fluency
- Good book intro
- Independence
- Say the letters over and over again. Visualize it – over and over
- Confusions
- You could really see him try to process
- If you say it to them they will eventually say it to themselves
- Bring that together
- Linking sound sequence to letter sequence – H/R sounds in words – Breaking – TWA
- Successful problem solving – take the child back to something he has worked on successfully – known to unknown
- Always work from known
- In this chapter it tells you how to work with words. You can work with words anywhere
- Learning how words work
- We have to break it down to understand – anytime – reciprocal
- Differentiate

Context

- The things that we had to read for this session were perfect. You are trying to get him to process it in his head. He should know it quickly. So slow
- When I watched him in class he couldn’t find the compound word. Just to re-enforce for him.
REFLECTIVE PRACTITIONERS

- Connection to class
- Sometimes the teachers are not doing the best practice. Right?
- Can I tell you what would make an awesome primary lesson? You do rhyming and they are trying to change the middle. They don’t understand this concept. Phonological awareness.
- Work more on how words work with my class. Can use the H/R sounds task with students in classroom. Modify it.
- All of my Grade 3’s would benefit so much from this task. (How to hear and record sounds slowly)

Conversations: April 9th, 2009

Process

Organization

- Anger management – you can’t focus on anything else – trigger – brain
- Organization of lesson to make it easy
- Problems with technology – to do video analysis – computers down.
- I wanted you to take the time because you are not given the time to do this important part.
- Letter perception – When she goes to the board she tells her what to do.

Theory

- Studying letters /sounds in the writing sections
- Make that connection for him
- Too much to figure out

Observations

- I started out in RR thinking that it was right or wrong, now I give the benefit of doubt, why we start early try to unteach the things that they have learned
- If you think in the negative that is what they will give you..reaffirm that maybe in thinking that he is not doing work at home
- It opened my eyes to the fact that I might have to teach more
- He had so many difficulties..not just one ..phone awareness, home life, etc.
- Learned certain things – hard to unlearn
- Recognizing learned behaviors that are detrimental to progress.
- I would like to know your comments on what you saw.
- Rethink my known because I didn’t realize how many sounds and letters he didn’t know.
- Do you ever see in your experience that children on behavior plans act up because they are acad. Frustrated…then because they act up missing a lot? So they come in with fewer skills?
REFLECTIVE PRACTITIONERS

- You have to know what independence looks like.
- It takes so much time
- Learn about my own biases.
- Last section of training is putting it all together and being able to analyze your own teaching and knowing where you are going and what you have to learn.
- What have you learned?
- What do you now have to learn?

Practice

- How do you teach? Particular problems…How do you teach a child with particular problems or issues?..
- How to deal with anger?
- There is a whole host of things and I was only focusing on one
- Resistant to attempt whenever he is pushed beyond his comfort level – shut down
- Parents understanding of what we do.
- Educational practices have changed so much since we went to school.
- Children are expected to know much more than we did.
- Strong skills that block learning.
- After first two weeks and child is not making progress, check up on teaching./videotaping
- What could I be doing differently? What have I learned? What am I going to do now? Where do I go now? Guidebook
- Is there a right way? Teaching decisions – focus.
- Writing – composition from reading book – transference
- Allow flexible formation of story.
- Time spent on writing
- I wouldn’t have time to do all that.
- What have you learned?
- How do I know that?
- Constantly ask yourself:
  - What am I teaching today? Have I taught it? Do they know it?
- Parental support is important.
- Is it not a preconceived idea…about progress? Then they need it even more and we have to figure out a way that they can get this.
- Practice the word
- Knowing your students
- I am running out of time.
- What did you learn today?

Content
REFLECTIVE PRACTITIONERS

- Nice to see that the children only needed initial book intro.
- I tried everything I could with him.
- Closing the gap
- Not discovered a way to help them learn
- The brain is complex. Doesn’t go beyond the part of the brain for learning. It stops before it even reaches there.
- Focus on learned bad habits
- Understand concept of letter sound associations. That you transfer sound to letter and letter to sound that it is time to start switching them so that they realize that they can’t go up to grade 6 using invented spelling.
- Being accountable
- Invented spelling comes back to his meaning and understanding of what is writing.
- Transference of writing skills
- Get you to look at your own teaching – analysis through video.
- Can you give some idea of how to get to sounds if they don’t know them.
- Focus on writing section to get to letter sound associations.
- Have a lot of strategies for avoiding – works well for them – smart kids – use his powers for forces of good and not evil.
- They have come so far in understandings and concepts.
- When you do letter recog. Should you do sounds with it?
- Roaming around the known
- Do a lot of writing. You would notice in writing if he didn’t know the sounds. Make letter to sound associations
- Phonological awareness and letters. I feel that I have a really big obstacle to overcome
- Teaching concept in isolation versus in context.
- Promote a lot of independence.
- Prompts – Get comfortable in using a few, then vary them.
- What is independence in Grade 1?
- Never assume
- Independence in writing
- When I was doing boxes he had already made the connection that each box is a letter.
- We don’t know how much writing is going on in the classroom.
- They are not learning from copying
- How do you build fluency?
- Processing taking place. Put it together – orchestrate
- How do you think it sounded? Carry it further.
- I am so bad at getting to new words.
REFLECTIVE PRACTITIONERS

- I don’t know
- Practice some of the structures
- Meaning is the key
- Asking them to access info- meaning, structure and visual information
- Reread sentence from day before – trigger comp., wd. Recog., own voc., familiar reading,
- How to get more vocabulary?
- Low level processing
- Sound boxes – awesome

Context

- I don’t consult this section enough in guidebook
- Find a balance in your teaching. This is where you have to be able to analyze your teaching.
- What you said there makes me think of in the classroom kids that are just copying down are not making any connections. That is a big, big learning thing that you just mentioned. Isolated – no meaning.
- I think it would make more sense if the teacher in the classroom put the word and relate it to something.
- Never assume the student has learned something – evidence
- Do your students take their books to the classroom to read?
- In the classroom if my kids are stuck they have resources to back them up – word wall,
- In classroom the teacher says that they are reading way above what he is reading with me.
- How much do kids in Grade 1 do writing on their own? Help them compose and but they have to write alone or in groups. There are many diff. ways of doing it and there are diff. Types of writing. Some in Grade 3 are doing same thing as children in Grade 1
- I have mine write for at least 20 minutes on own.
- In primary we are supposed to start writing right away
- It is a process.
- Transference to class – Knowledge to practice
- In older grades you so pick up much more easily what they are missing.
- My whole class is at a Grade 1 level – I use it all the time.
- We talked about this before about how all teachers at lower grades should go through Reading Recovery training.
- So many teachers that don’t know that they are doing all little pieces but I bet if they would come and train they would get the whole picture.
- I had a teacher come up to me – you know he knows the word, but when I let him see the pictures…she was hiding the picture.
## Kelton’s Journal

### Process

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td><strong>Organization</strong></td>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>1. space</td>
<td>1. look at notes</td>
<td></td>
</tr>
<tr>
<td>2. letters</td>
<td>2. how did you know?</td>
<td></td>
</tr>
<tr>
<td>3. keeping notes</td>
<td>3. oppor. To discuss</td>
<td></td>
</tr>
<tr>
<td>4. record keeping</td>
<td>4. frustration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. evidence</td>
<td></td>
</tr>
<tr>
<td><strong>Theory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. wd vs text</td>
<td>1. attend to meaning</td>
<td>1. twa</td>
</tr>
<tr>
<td>2. early reading beh.</td>
<td>2. access to m and st.</td>
<td>2. problem solving</td>
</tr>
<tr>
<td>3. wd vs whole</td>
<td>3. cross-check</td>
<td>3. item vs whole</td>
</tr>
<tr>
<td>4. questions</td>
<td>4. problem solve</td>
<td>4. continuous text</td>
</tr>
<tr>
<td>5. lingo</td>
<td>5. R+W voc.</td>
<td>5. p/s in R/W</td>
</tr>
<tr>
<td>7. spelling</td>
<td></td>
<td>7. prompts</td>
</tr>
<tr>
<td>8. ways of solving</td>
<td></td>
<td>8. Why F/R?</td>
</tr>
<tr>
<td>9. searching for meaning</td>
<td></td>
<td>9. What words to use in HRS</td>
</tr>
<tr>
<td>10. acc. Learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. S/E system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## REFLECTIVE PRACTITIONERS

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVATION</strong></td>
<td><strong>OBSERVATION</strong></td>
<td><strong>OBSERVATION</strong></td>
</tr>
<tr>
<td>1. What is known?</td>
<td>1. look at notes for FR</td>
<td>1. how R sounds</td>
</tr>
<tr>
<td>2. strengths</td>
<td>2. clarify shifts</td>
<td>2. questions</td>
</tr>
<tr>
<td>3. learning</td>
<td>3. how did you know?</td>
<td></td>
</tr>
<tr>
<td>4. record keeping</td>
<td>4. opp. To discuss</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. frustration of student</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. all about getting evidence</td>
<td></td>
</tr>
<tr>
<td><strong>PRACTICE</strong></td>
<td><strong>PRACTICE</strong></td>
<td><strong>PRACTICE</strong></td>
</tr>
<tr>
<td>1. question of assessment</td>
<td>1. teacher isolation</td>
<td>1. Intro to the book</td>
</tr>
<tr>
<td>2. flex according to needs</td>
<td>2. working 1-1 great</td>
<td>2. be positive</td>
</tr>
<tr>
<td>3. needs vs strengths</td>
<td>3. cut up sentence-phrasing</td>
<td>3. don’t assume</td>
</tr>
<tr>
<td>4. observation</td>
<td>4. teacher set prior</td>
<td></td>
</tr>
<tr>
<td>5. R levels</td>
<td>5. letter/wd work from text</td>
<td></td>
</tr>
<tr>
<td>6. W voc.</td>
<td>6. put it together</td>
<td></td>
</tr>
<tr>
<td>7. reader vs remembering</td>
<td>7. how words work</td>
<td></td>
</tr>
<tr>
<td>8. child noticing</td>
<td>8. focused on looking at wds instead of pic.</td>
<td></td>
</tr>
<tr>
<td>9. anticipation</td>
<td>9. What have I taught today?</td>
<td></td>
</tr>
<tr>
<td>10. time</td>
<td>10. What will I teach tomorrow?</td>
<td></td>
</tr>
</tbody>
</table>
### CONTENT

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. remember</td>
<td>2. wd attack skills</td>
<td>2. Experience nec.</td>
</tr>
<tr>
<td>3. guessing with picture</td>
<td>3. letter/wd detail</td>
<td>3. Questions</td>
</tr>
<tr>
<td>4. looking-visual – wd.</td>
<td>4. learn to hear sounds</td>
<td>4. Time an issue</td>
</tr>
<tr>
<td>5. questions</td>
<td>5. use the known …</td>
<td>5. Boys vs girls</td>
</tr>
<tr>
<td>– Print/meaning</td>
<td>7. uses strategies</td>
<td>7. Prior knowledge</td>
</tr>
<tr>
<td>– Prompting</td>
<td>8. ind. Responding</td>
<td>8. Interpretation</td>
</tr>
<tr>
<td>– Hearing and seeing</td>
<td>10. construct eff. Networks</td>
<td>10. Punctuation</td>
</tr>
<tr>
<td>– Independence</td>
<td>11. strategic act.</td>
<td>11. Meaning</td>
</tr>
<tr>
<td>– Fr from known</td>
<td>12. child initiates</td>
<td></td>
</tr>
<tr>
<td>– Brain at.</td>
<td>13. prompts</td>
<td></td>
</tr>
<tr>
<td>– Background-structure</td>
<td>14. item vs whole</td>
<td></td>
</tr>
<tr>
<td>– Orchestration of m, sty &amp; v</td>
<td>15. links between R+W</td>
<td></td>
</tr>
<tr>
<td>– Accelerated</td>
<td>16. demonstrate</td>
<td></td>
</tr>
<tr>
<td>– S/E system</td>
<td>17. scaffold</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18. shifts over time</td>
<td></td>
</tr>
<tr>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 3</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>1. the link between R+W</td>
<td>-better observer</td>
<td>-Feeling of being overwhelmed</td>
</tr>
<tr>
<td>2. I assumed they could already read</td>
<td>-still on item knowledge</td>
<td>-Experiences – review- with new light-deeper understanding, but raise unconsidered questions</td>
</tr>
<tr>
<td>3. most of my assumptions came from how I was taught</td>
<td>-what to look for?</td>
<td>-Further questions to grow.</td>
</tr>
<tr>
<td>4. just assumed that reading was learned 1st, writing came later</td>
<td>-Knowledge of theory increasing</td>
<td></td>
</tr>
<tr>
<td>5. I assumed that the teacher acc. the pupils</td>
<td>-noticing behaviors</td>
<td></td>
</tr>
<tr>
<td>6. the teacher supports activities that allow the pupils to accelerate themselves.</td>
<td>directionality issues</td>
<td></td>
</tr>
<tr>
<td>7. Resource – more attentive to the strategies students use</td>
<td>-comment on visual aspect of wds.</td>
<td></td>
</tr>
<tr>
<td>8. use questions “How did you know?”</td>
<td>-I’ve tried to bring the training into my math class where issues of processing language, decoding symbols, and directionality are impt.</td>
<td></td>
</tr>
<tr>
<td>9. more aware of how word problem attack are just reading strategies.</td>
<td>-as a learner, I’ve further established for myself that I learn by being actively engaged.</td>
<td></td>
</tr>
</tbody>
</table>

-Record keeping crucial

-in dialogue by observing skills and by doing. Text alone doesn’t do it.

-Gaining knowledge of R+W theory

-Increase understanding of how we learn

-Discuss what success does for children.

-Social networking of PD
<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>impt.</td>
<td>sharing</td>
<td>-whole staff buy in.</td>
</tr>
<tr>
<td>-problem solving</td>
<td>-support</td>
<td>-teaching children to be strategic problem solvers.</td>
</tr>
<tr>
<td>-support</td>
<td>-teaching children to be strategic problem solvers.</td>
<td></td>
</tr>
<tr>
<td>-whole staff buy in.</td>
<td>-Assessing –dev. Program – planning</td>
<td>-Reading Recovery</td>
</tr>
<tr>
<td>-Assessing –dev. Program – planning</td>
<td>-Now an awareness of own teaching</td>
<td></td>
</tr>
<tr>
<td>-Reading Recovery</td>
<td>-Now an awareness of own teaching</td>
<td></td>
</tr>
<tr>
<td>– aware of own teaching</td>
<td>– processing skills</td>
<td>– asking questions</td>
</tr>
<tr>
<td>– noticing things</td>
<td>– prompting</td>
<td>– problem solving</td>
</tr>
<tr>
<td>– processing skills</td>
<td>– prompting</td>
<td></td>
</tr>
<tr>
<td>– prompting</td>
<td>– problem solving</td>
<td></td>
</tr>
<tr>
<td>– asking questions</td>
<td>– problem solving</td>
<td></td>
</tr>
<tr>
<td>– problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– awareness of own teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– awareness of own teaching</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

Erica’s JOURNAL

**PROCESS**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORGANIZATION</strong></td>
<td><strong>ORGANIZATION</strong></td>
<td><strong>ORGANIZATION</strong></td>
</tr>
<tr>
<td>1. lessons</td>
<td>1. be prepared for writing</td>
<td></td>
</tr>
<tr>
<td>2. pace</td>
<td>2. lesson records – keep track</td>
<td></td>
</tr>
<tr>
<td>3. expectation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. support</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THEORY</strong></td>
<td><strong>THEORY</strong></td>
<td><strong>THEORY</strong></td>
</tr>
<tr>
<td>1. sight words</td>
<td>1. CONSTRUCT</td>
<td>1. fluency</td>
</tr>
<tr>
<td>2. self-corrections</td>
<td>2. sound out</td>
<td>2. see things diff</td>
</tr>
<tr>
<td>3. prompted</td>
<td>3. write sounds</td>
<td>3. more skills</td>
</tr>
<tr>
<td>4. strategic activity – initial letter (learning to look at print)</td>
<td>4. hear sounds</td>
<td>4. problem solving in writing</td>
</tr>
<tr>
<td>5. understanding meaning, st, and v</td>
<td>5. spaces</td>
<td>5. visual, meaning and st</td>
</tr>
<tr>
<td>6. memory</td>
<td>6. punctuation</td>
<td>6. CAP</td>
</tr>
<tr>
<td>7. look at strengths</td>
<td>7. S/C</td>
<td>7. independence</td>
</tr>
<tr>
<td>8. phrasing</td>
<td>8. s/M</td>
<td></td>
</tr>
<tr>
<td>9. brain function</td>
<td>9. not consistent in use</td>
<td></td>
</tr>
<tr>
<td>10. H/R sounds – function</td>
<td>10. sounding out</td>
<td></td>
</tr>
<tr>
<td>11. encouragement of R strategies</td>
<td>11. search for and use words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Picture to solve words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. independence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14. problem solving on v info</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15. chunks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16. 1-1 matching</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17. early lit beh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18. connections in brain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19. diff between letter/ wd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20. complex</td>
<td></td>
</tr>
<tr>
<td>REFLECTIVE PRACTITIONERS</td>
<td>OBSERVATION</td>
<td>OBSERVATION</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>1. pre-school readiness</td>
<td>1. the known</td>
</tr>
<tr>
<td></td>
<td>2. student not familiar with books</td>
<td>2. ROK-engaged</td>
</tr>
<tr>
<td></td>
<td>3. question of parental know.</td>
<td>3. diss in myself</td>
</tr>
<tr>
<td></td>
<td>4. questions – teacher prep, pre-service</td>
<td>4. teacher overwhelmed</td>
</tr>
<tr>
<td></td>
<td>5. knowledge of what and how</td>
<td>5. speech impediment</td>
</tr>
<tr>
<td></td>
<td>6. S/C seems normal</td>
<td>6. look at strengths and weak</td>
</tr>
<tr>
<td></td>
<td>7. lessons, pace, expectation, support</td>
<td>7. children need direct inst.</td>
</tr>
<tr>
<td></td>
<td>8. I am not as harsh as I thought</td>
<td>8. didn’t know how to teach</td>
</tr>
<tr>
<td></td>
<td>9. need to support students more</td>
<td>9. pre-service lacking</td>
</tr>
<tr>
<td></td>
<td>10. all teaching should be on con. Texts</td>
<td>10. process of learning difficult</td>
</tr>
<tr>
<td></td>
<td>11. obs survey a reflection of what she taught</td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

<table>
<thead>
<tr>
<th>PRACTICE</th>
<th>PRACTICE</th>
<th>PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. needed – specialty in early ed.</td>
<td>1. Transference</td>
<td>1. formal assessment</td>
</tr>
<tr>
<td>2. ass. Only a beginning</td>
<td>2. pushing</td>
<td>2. records</td>
</tr>
<tr>
<td>3. normal practice?</td>
<td>3. early behaviours</td>
<td>3. reflection</td>
</tr>
<tr>
<td>5. word study</td>
<td>5. no teaching</td>
<td></td>
</tr>
<tr>
<td>6. examine of own teaching</td>
<td>6. time an issue</td>
<td></td>
</tr>
<tr>
<td>7. What is really known?</td>
<td>7. making progress</td>
<td></td>
</tr>
<tr>
<td>8. question myself</td>
<td>8. new kind of teaching</td>
<td></td>
</tr>
<tr>
<td>10. don’t know where to take him</td>
<td>10. the R and W process difficult</td>
<td></td>
</tr>
<tr>
<td>11. go from known</td>
<td>11. brain involvement</td>
<td></td>
</tr>
<tr>
<td>12. positive</td>
<td>12. a lot of steps</td>
<td></td>
</tr>
<tr>
<td>13. alphabet book</td>
<td>13. patience</td>
<td></td>
</tr>
<tr>
<td>14. time concerns</td>
<td>14. evidence of learning</td>
<td></td>
</tr>
<tr>
<td>15. right vs wrong</td>
<td>15. support</td>
<td></td>
</tr>
<tr>
<td>16. the imp. Of writing</td>
<td>16. struggled</td>
<td></td>
</tr>
<tr>
<td>17. encouraging H/R sounds</td>
<td>17. initial and final sounds</td>
<td></td>
</tr>
<tr>
<td>18. read smoothly</td>
<td>18. remember</td>
<td></td>
</tr>
<tr>
<td>19. steady pace</td>
<td>19. taught H/F wds and sight wds.</td>
<td></td>
</tr>
<tr>
<td>20. better intro</td>
<td>20. scan from left to right</td>
<td></td>
</tr>
<tr>
<td>21. efficient use of practice</td>
<td>21. confused</td>
<td></td>
</tr>
<tr>
<td>22. confidence</td>
<td>22. at a loss</td>
<td></td>
</tr>
<tr>
<td>23. encourage</td>
<td>23. try</td>
<td></td>
</tr>
<tr>
<td>24. different</td>
<td>24. cognitive and emotional learn</td>
<td></td>
</tr>
<tr>
<td>25. make it easy</td>
<td>25. behavior management</td>
<td></td>
</tr>
<tr>
<td>26. H/R sounds – not teaching him to do</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. solve words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. wds he chose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. similar sounds bet. Two wds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. look at words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. questions of competence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. effective decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. mistakes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CONTENT

**Term 1**
1. mind shift about R  
2. pictures-conversation  
3. the whole vs the ind.  
   Letters  
4. memory  
5. structure is impt  
6. question of strategic act  
   – one strategy at a time  
   – in sequence? – right or wrong?  
7. is it OK to consciously  
   think about what  
   strategies using?  
8. read resources  
9. how to teach without  
   direct instruction does  
   learning happen?  
10. neural networks  
11. background know.  
12. experience, needs in Gr.  
   1 crucial year for R.  
13. how do I teach reading?  
14. multiple strategy inst.  
15. change  
16. frustrated to see no  
   progress  
17. what to do?  
18. easier to harder  
19. using v and m to solve  
20. children have so much  
   to learn in R and W they  
   need direct inst.  
21. HR sound-und. have to  
   teach in context  
22. unsure of HRW  
23. directionality  
24. handle elkonen boxes –  
   have to teach this  
25. solve wds more effect.  
26. adding difficult words  
   will make him think  
   poorly about R  
27. Fluency  
28. survive in classroom  
29. slip through cracks

**Term 2**
1. Begin to S/C  
2. actually looking at wds  
3. actually looking at wds  
4. monitors, SC, uses V info and  
   meaning  
5. specific teaching – letter/sound  
   association  
6. say/listen  
8. skills vital  
9. taken for granted  
10. will not catch up  
11. differences  
12. identify  
13. look  
14. composition  
15. practice impt  
16. master concepts  
17. time  
18. move at own pace  
19. demonstrate control  
20. fluency  
21. transference to classroom  
22. repeats  
23. explains  
24. Prompts – focus on a  
   particular strategy-not yet under  
   conscious control-connections-  
   help re-enforce network in brain  
25. after RR teach unknown  
   words or parts  
26. go from known to unknown  
27. the noticing reader vs the  
   unnoticing reader  
28. connections between R and  
   W  
29. check  
30. teach for searching  
31. concrete vs abstract  
32. accommodate learning  
   needs  
33. success  
34. multiple intelligences  
35. positive outlook

**Term 3**
- writing a challenge  
  – HR sounds  
- strengths vs weaknesses  
- records important –  
  daily, words, chunks,  
  prompts  
- make connection  
- assessment  
- RR vs classroom  
  child can vocalize  
  strategy  
- act on it  
- 1st students not  
  enough word work  
- Ways of solving in  
  writing and R –  
  break, chunks  
- upsetting – level of  
  support for ex. RR  
  children  
- regression  
- strategic activity  
  practice necessary  
  for ind.  
- independence in  
  class  
- ability to  
  summarize strengths  

REFLECTIVE PRACTITIONERS

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. difficult to und.</td>
<td>36. not yet discovered the way to help him learn</td>
<td></td>
</tr>
<tr>
<td>31. build on it daily</td>
<td>37. don’t jump to conclusions</td>
<td></td>
</tr>
<tr>
<td>32. need strategies to solve wds-as a check list in sequence</td>
<td>38. strong skills that block learning</td>
<td></td>
</tr>
<tr>
<td>33. still confused about how to teach R and W</td>
<td>39. writing needs attention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40. R and W connected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41. R and W not a passive process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>42. role of teacher – role of student</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43. am I effective?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>44. can I make this better?</td>
<td></td>
</tr>
</tbody>
</table>

CONTEXT

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. amazed at Reading and W growth – S/C, picture clues to solve wds, wds are right, sounds and letters, write harder wds.</td>
<td>1. transferring learning from Rr to classroom</td>
<td></td>
</tr>
<tr>
<td>2. classroom obs – student using knowledge in classroom</td>
<td>2. wonderful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. grow as a R + W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. wonderful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. grow as a Reader and W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. biggest mind shift –teaching in isolation vs whole</td>
<td></td>
</tr>
<tr>
<td>3. frustrated – how to teach R in classroom – with book resources on R., how to get a solid foundation?, is there a correct way?, W seem easier to teach</td>
<td>7. understanding of SA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Und. of learning diff.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. need a diff. Type of instruction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. time an issue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. RR theory transfers to classroom – Theory – HRS, direct, prompts to use m, st and v info.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Abandoned reading strategies and practices that are counter productive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. the need to encourage teachers to continue to grow and develop as learners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14. It would be diff. For Admin to guide early educ teachers if they are unaware of how children need to be taught</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15. constructive critics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16. student centered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17. we as teachers must have that same expectation for ourselves</td>
<td></td>
</tr>
<tr>
<td>4. Brain networking in Gr. 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Am I teaching the Gr. 1’s to R and W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. If the alphabet needs to be taught first – how do I get to effective R/W abilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 3</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>8. children and reading – getting wds right – skip and keep going – no meaning</td>
<td>19. challenges of classroom</td>
<td>12. more analysis necessary</td>
</tr>
<tr>
<td>9. Dev. Knowledge of how R + W</td>
<td>20. focus on strengths</td>
<td>instruction</td>
</tr>
<tr>
<td>10. use to teach in sequence – letter, sound, wds, … not a good idea</td>
<td>21. environment impt.</td>
<td>13. difficulty of</td>
</tr>
<tr>
<td>11. teach directionality</td>
<td>22. Trying to set up a more routine environment in my classroom as well</td>
<td>14. R and W is hard work</td>
</tr>
<tr>
<td>12. now letter and sound together</td>
<td>23. I try to focus on a diff chunk each week and have them book for</td>
<td>15. practice everyday</td>
</tr>
<tr>
<td>13. question so many things</td>
<td>24. isolation vs whole text</td>
<td>16. encourage strategic thinking</td>
</tr>
<tr>
<td>14. thinking and questioning teaching practice</td>
<td>25. watching and observing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26. applying to practice better</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27. able to observe all</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28. It is amazing how their mind works</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. I know I would not be teaching reading the way I do, nor would I know to observe children in the way I do. I am so grateful that I have had this opportunity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. life-long learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31. reading books</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32. attending sessions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33. visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34. access to many sources of learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35. funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36. they need standards for themselves to help them feel successful</td>
<td></td>
</tr>
</tbody>
</table>
**Nora's Journal**

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORGANIZATION</strong></td>
<td><strong>ORGANIZATION</strong></td>
<td><strong>ORGANIZATION</strong></td>
</tr>
<tr>
<td>Organization of lesson diff.</td>
<td>Mentor to have him read his books</td>
<td></td>
</tr>
<tr>
<td>Steps firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis of RR</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THEORY</strong></td>
<td><strong>THEORY</strong></td>
<td><strong>THEORY</strong></td>
</tr>
<tr>
<td>Purpose of Familiar Reading</td>
<td>Address his learning?</td>
<td>Using all strategies</td>
</tr>
<tr>
<td>Letter/sound association</td>
<td>Individual vs whole</td>
<td>Structure to S/C</td>
</tr>
<tr>
<td>Words</td>
<td></td>
<td>Writing – short simple sentences</td>
</tr>
<tr>
<td>S/C and reads for meaning</td>
<td></td>
<td>Word attack</td>
</tr>
<tr>
<td>In context knows wds but cannot recall isolated</td>
<td>At point of error what could we prompt for?</td>
<td></td>
</tr>
<tr>
<td>Hears first last sound</td>
<td>HRSW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWAR</td>
<td>Visual Perception</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Detect errors for themselves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Search for more information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitor for errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correct those errors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check a decisions</td>
</tr>
<tr>
<td><strong>OBSERVATION</strong></td>
<td><strong>OBSERVATION</strong></td>
<td><strong>OBSERVATION</strong></td>
</tr>
<tr>
<td>Literacy Degree</td>
<td>Easy vs difficult</td>
<td></td>
</tr>
<tr>
<td>Student progress</td>
<td>Not reading at home</td>
<td></td>
</tr>
<tr>
<td>Lesson analysis</td>
<td>Difficult to predict</td>
<td></td>
</tr>
<tr>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 3</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>PRACTICE</td>
<td>PRACTICE</td>
<td>PRACTICE</td>
</tr>
<tr>
<td>Headed in right direction</td>
<td>Teaching a R and W voc</td>
<td>How much support is needed?</td>
</tr>
<tr>
<td>Basics?</td>
<td>Composition</td>
<td>Don’t have him spell</td>
</tr>
<tr>
<td>ROA</td>
<td>H/R sounds</td>
<td>Recommendation to discontinue</td>
</tr>
<tr>
<td>Discuss progress</td>
<td>Modeling</td>
<td>Monitor students</td>
</tr>
<tr>
<td>Recording differences</td>
<td>Ind vs whole</td>
<td>Pick up on his cues</td>
</tr>
<tr>
<td>Lessons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early behaviors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX J

#### ANALYSIS OF STUDENT DATA

<table>
<thead>
<tr>
<th>___ First ___</th>
<th>___ Second ___</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date __________________</td>
<td>School __________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Criterion</strong></th>
<th><strong>Strengths</strong></th>
<th><strong>Predictions</strong></th>
<th><strong>Inservice sessions</strong></th>
</tr>
</thead>
</table>
| Behavior of good readers | Evidence from observation surveys | Teaching needed | Date-
What do they need to know? | What do they now know? | What must be taught? | Session-|
| **Port Matiland** | **Access to visual information** | **Term 1** |
| Could read at Level 1 | Prompting for monitoring, searching, C/C in R+W | September 10-11 |
| Has most early CAP | Word solving skills in R+W | PD – Admin of Obs Survey. |
| He could read a small band of H/F words | Be aware of speech issues when HR sounds and twa in reading. Support him. | September 15th – analysis of obs survey results. |
| 16 Burt | A firm bank of H/F words | September 30-|
| could write 20 | Ways of solving words in R+W(H/R sounds) | Moving into instruction. |
| H/F | R use the visual infor | October 7th - |
| could hear and record | Clear up letter confusions | Observing Active problem solving |
| initial sounds-some endings | C/C info when reading | October 21st – |
| Early stage of reading-using m and st | Phrasing in fluency | Exploring processing changes in Reading and Writing. |
| Knows most upper lower case letters | Punctuation | November 4th – |
| Know basic and some mid based CAP | Spacing-visual perception | Teaching for Effective processing. |
| Could read 8 H/F words | | November 18th- |
| Could read 15 BURT/H/F | | |
| Could write 30 wds | | |
| in 10 min | | |
| Could HR 31 | | |
| initial/ final & some | | |

Page 22 – Obs. Survey

Teachers aim to produce independent learners whose reading and writing improve whenever they read and write. Children become independent:

- if the early behaviors are appropriate, secure and habituated

- if children learn to monitor their own reading and writing.

- if they search for several kinds of information, in word sequences, in longer stretches of meaning, and in letter sequences.
REFLECTIVE PRACTITIONERS

- if they discover new things for themselves.

- if they check that one kind of information fits with other available information.

- if they repeat themselves as if to confirm with what they have read or written.

if they correct themselves, taking the initiative for making any sources of information they have found fit neatly together (that is getting the words right)

-and if they solve new words by these means.

Each statement could be applied to either reading or writing.

<table>
<thead>
<tr>
<th>Medial</th>
<th>Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>medial sounds</td>
<td>monitor for m while using st and v information</td>
</tr>
<tr>
<td>Likes to compose and write stories</td>
<td>develop bank of H/F words</td>
</tr>
<tr>
<td>Reading at L-4- using m and st and some visual info.</td>
<td>problem solving skills on wds.</td>
</tr>
<tr>
<td>CAP-basic and medial</td>
<td>Search for visual information</td>
</tr>
<tr>
<td>WR-small taught wds-at problem solving “no” same with BURT</td>
<td>Self/monitor</td>
</tr>
<tr>
<td>H/R-knows most initial final vowels</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>South</td>
</tr>
<tr>
<td></td>
<td>HR sounds</td>
</tr>
<tr>
<td></td>
<td>Visual info- his attempts have to match the word</td>
</tr>
<tr>
<td></td>
<td>Has to monitor-don’t make up long phrases for a 3 wd line</td>
</tr>
<tr>
<td></td>
<td>No predictions</td>
</tr>
<tr>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>that print contains a message</td>
</tr>
<tr>
<td></td>
<td>access HF wds for writing</td>
</tr>
<tr>
<td></td>
<td>1:1 match</td>
</tr>
<tr>
<td></td>
<td>behavioral control</td>
</tr>
<tr>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>firmly control early strategies</td>
</tr>
<tr>
<td></td>
<td>S/M own reading in order to notice errors</td>
</tr>
<tr>
<td></td>
<td>Search for info</td>
</tr>
<tr>
<td></td>
<td>Teaching for the constructive use of information – strategic activity in R+W.</td>
</tr>
</tbody>
</table>

December 16th – Fostering accelerated learning

December
Discontinuing

January 21 – Reviewing progress – knowledge and teaching

February 10
Reviewing progress – knowledge and teaching (con’t)

Feb 25th – what is known?

March 10th – Teaching for problem solving (Evidence)

March 31 – Teaching with progress in mind.

April - Teaching through effective communication: verbal and non verbal.
<table>
<thead>
<tr>
<th>South</th>
<th>within wds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could repeat 2 lines of text</td>
<td>Solve new wds through m, st and v information</td>
</tr>
<tr>
<td>Knew some basic concepts of print</td>
<td>Confirm by re-reading</td>
</tr>
<tr>
<td>Could follow a pattern</td>
<td>C/C one source of info with another</td>
</tr>
<tr>
<td>Using m and st</td>
<td>S/C using multiple sources of info</td>
</tr>
<tr>
<td>Knew most capital letters</td>
<td>Read fluently</td>
</tr>
<tr>
<td>Could write his name</td>
<td>HR sounds</td>
</tr>
<tr>
<td>Knew that letters meant something</td>
<td>Look beyond initial letter</td>
</tr>
<tr>
<td>R-used m and st and initial visual</td>
<td>Problem solving using m st and v infor.</td>
</tr>
<tr>
<td>Phrased most places</td>
<td>Monitor</td>
</tr>
<tr>
<td>Knows upper case and some lower</td>
<td>Search</td>
</tr>
<tr>
<td>CAP- early</td>
<td>S/C using m, st and v at point of error.</td>
</tr>
<tr>
<td>Knows 3 H/F words</td>
<td>Transfer to classroom</td>
</tr>
<tr>
<td>In W relies on initial sound and 4 known words</td>
<td>Let/sound relationship</td>
</tr>
<tr>
<td>______________</td>
<td>HF word</td>
</tr>
<tr>
<td>___</td>
<td>Fluency</td>
</tr>
<tr>
<td>using m, st</td>
<td>Orchestration of m, st and v info.</td>
</tr>
<tr>
<td>knows most letters of alp.</td>
<td>Monitor</td>
</tr>
<tr>
<td>Has vey early CAP slo::s</td>
<td>Search</td>
</tr>
<tr>
<td>Knows I and to. Burt “7” known</td>
<td>S/C at difficulty</td>
</tr>
<tr>
<td>Could write 13 wds mostly family members</td>
<td>Build bank of HF wds</td>
</tr>
<tr>
<td>Can hear and record initial sounds</td>
<td>Monitor for visual info</td>
</tr>
<tr>
<td>Some wds in sequence</td>
<td>Compose</td>
</tr>
</tbody>
</table>

| April 21st: |
| Problem solving on continuous text-Taking words apart in reading |

| May : The Observation Survey: |
| An assessment to guide our teaching |

| May 19th – Knowing what to teach |

<p>| June 10th – Reflecting on Teaching and Learning |</p>
<table>
<thead>
<tr>
<th>REFLECTIVE PRACTITIONERS</th>
<th>At error he used m st and initial v</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Will C/C and use more visual info</td>
</tr>
<tr>
<td></td>
<td>He has a bank of H/F known wds</td>
</tr>
<tr>
<td></td>
<td>With prompting can write 10 wds in 10 min.</td>
</tr>
<tr>
<td></td>
<td>Will hear and record some sounds if accesor helps by saying wd.</td>
</tr>
<tr>
<td></td>
<td>Plymouth</td>
</tr>
<tr>
<td></td>
<td>Using memory- m and st</td>
</tr>
<tr>
<td></td>
<td>Can remember pattern</td>
</tr>
<tr>
<td></td>
<td>Can rec. some upper and lower case letters</td>
</tr>
<tr>
<td></td>
<td>Earliest CAP</td>
</tr>
<tr>
<td></td>
<td>Could write his name and I</td>
</tr>
<tr>
<td></td>
<td>Can name a few letter/sound ass.</td>
</tr>
<tr>
<td></td>
<td>Und. Diff between wd and letter</td>
</tr>
<tr>
<td></td>
<td>Relies on memory using m and st</td>
</tr>
<tr>
<td></td>
<td>Knows most letters</td>
</tr>
<tr>
<td></td>
<td>Early concept of print</td>
</tr>
<tr>
<td></td>
<td>3 known R words</td>
</tr>
<tr>
<td></td>
<td>wrote 5 words with prompts</td>
</tr>
<tr>
<td></td>
<td>could record initial consonants</td>
</tr>
<tr>
<td></td>
<td>at times says wds</td>
</tr>
<tr>
<td></td>
<td>HR sounds 1:1 matching</td>
</tr>
<tr>
<td></td>
<td>2nd round</td>
</tr>
<tr>
<td></td>
<td>recognize all upper and lower case letter</td>
</tr>
<tr>
<td></td>
<td>learn to 1:1 monitor</td>
</tr>
<tr>
<td></td>
<td>good problem solver</td>
</tr>
<tr>
<td></td>
<td>use m, st and visual to monitor</td>
</tr>
<tr>
<td></td>
<td>S/C</td>
</tr>
<tr>
<td></td>
<td>Search</td>
</tr>
<tr>
<td></td>
<td>Transfer learning to class</td>
</tr>
<tr>
<td></td>
<td>Punctuation</td>
</tr>
<tr>
<td></td>
<td>Larger bank of sight wds to write fluently</td>
</tr>
<tr>
<td></td>
<td>Consistently use structure (ELL)</td>
</tr>
<tr>
<td></td>
<td>Good problem solver – use m, st and v to..</td>
</tr>
<tr>
<td></td>
<td>Monitor</td>
</tr>
<tr>
<td></td>
<td>S/C</td>
</tr>
<tr>
<td></td>
<td>Search at pt of error</td>
</tr>
<tr>
<td></td>
<td>Transfer to class</td>
</tr>
<tr>
<td></td>
<td>Independence in R+W</td>
</tr>
<tr>
<td></td>
<td>Math 1-1</td>
</tr>
<tr>
<td></td>
<td>Monitor R+W</td>
</tr>
<tr>
<td></td>
<td>C/C with m, st and v info</td>
</tr>
<tr>
<td></td>
<td>Solve unknown wds in R+W</td>
</tr>
</tbody>
</table>
slowly

2nd

Good L-R movement on text
R choppy-many T’s, not using m (picture)
Not yet 1-1
Know all upper case letters/confused 2 lower case
Know all basic concepts of print
Know 6 H/F words. BURT 11 first little known words.
Could write 9 words with prompting in 10 min.
Most initial sounds heard and final
Trying to use v info. To read alone
Good left to r on text(1-1 firm)
R phrased at times
Knows upper case letters most lower case
CAP she know all early concepts
She had basic H/F words in order
She could write 16 words in 10 min (H/F)
Knew most letter/sound assoc.

Build H/F word bank
Access visual info

Monitor
C/C with m, st and v info
Solving unknown words
H/F words
Become proficient in using v info.
w- focus and remain on task
monitor his R for fluency
use m, st and v info.
C/C one source with another
S/C using m, st and v info
Learn R+W voc
Spacing – spatial- to do with visual
HR – slow articulation
Solving in R+W – prompting
_________________

Firmly control early strategies
S/M own reading in order to notice errors
Search for info within wds
Solve new wds through m< st and v
| 2nd | Relying on m and st Predicting at wds when not known Using finger to monitor 1-1 Small bank of known reading voc Starting to look at initial v Letter/sound assoc quite strong r-sometimes using expression on known

South
At error he used m st and initial v Will C/C and use more visual info He has a bank of H/F known wds With prompting can write 10 wds in 10 min. Will hear and record some sounds if accesor helps by saying wd.

Central
Used meaning and st. to “read and initial letters Could read wd by wd Early CAP concepts Knew initial sounds and key HF wds Often ignores visual

| info. | Confirm by re-reading C/C one source of info with another S/C using multiple source of info HR Look beyond initial letters

Compose a written message that makes sense S/M in order to detect errors Read fluently to maintain m and check st and v info. Check st and v info. Build HF wds H/R sounds in wds SM in order to detect errors Ind. Compose a message Consist. Record sounds in wds. Look beyond initial letter to problem solve w- HR sound in order articulate wd slowly |
picture cues
At error using all sources of info
Some phrasing
Early and medium CAP
Strong bank of “known” HF wds
Strong HR

Plymouth
Reading from memory
Knows alphabet
Early and medial CAP
RV – 3 – Easy “known”
WV – known HF wds
Articulates wd slowly – initial and final sounds articulated

led by m, st and starting to use initial v
S/C using a combination of m, st and v infor.
Some phrasing – at times slow /deliberate
Knew most letters – letter sound ass.
CAP – early/medial
<table>
<thead>
<tr>
<th>concepts</th>
<th>Small bank of W &amp; R “known” wds.</th>
<th>Has 1:1 matching</th>
</tr>
</thead>
</table>
### REFLECTIVE PRACTITIONERS

**Analysis of Student Data**

Knowledge about prof. self, Determine teacher & student needs

Process: Knowledge about professional self, Where do i go now? Determine own needs and students needs

_____ First  _____ Second

Date __________________

---

<table>
<thead>
<tr>
<th>TEACHER NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE DEMONSTRATED FROM WRITTEN EVIDENCE</td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

Analysis of Student Data
Knowledge about prof. Self, Determine teacher & student needs
Process: knowledge about literacy theory
First  Second

Date ________________

<table>
<thead>
<tr>
<th>TEACHER NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE DEMONSTRATED FROM WRITTEN EVIDENCE THE UNDERSTANDING OF LITERACY THEORY (HOW DO CHILDREN LEARN HOW TO READ?)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Overall improved practice/deep understanding of literacy beh. & lit. Skills
Content: knowledge about practice

<table>
<thead>
<tr>
<th>TEACHER NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE ABOUT PRACTICE</td>
</tr>
<tr>
<td>(What does the teacher need to learn?)</td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

Analysis of Student Data
End Data
Content – Demonstrates a Deep Understanding of Literacy Behavior

<table>
<thead>
<tr>
<th>1ST</th>
<th>Based on Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using m and st. some v info.</td>
<td>Independent learners</td>
</tr>
<tr>
<td>Fluent on known texts.</td>
<td>Early behaviors</td>
</tr>
<tr>
<td>Knew most all upper and lower case letters.</td>
<td>Monitor</td>
</tr>
<tr>
<td>Knew the basics (CAP) 14</td>
<td>Search for info-</td>
</tr>
<tr>
<td>Could read 11 HF wds – easy ones</td>
<td>Discover</td>
</tr>
<tr>
<td>Wrote 17 wds with prompting – HF small wds (known)</td>
<td>Check</td>
</tr>
<tr>
<td>Records most initial consonant sounds.</td>
<td>Repeat /confirm-</td>
</tr>
<tr>
<td>Reading at Level 5</td>
<td>Correct</td>
</tr>
<tr>
<td>***********************************************</td>
<td>Solve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1ST</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>likes to compose and write</td>
<td></td>
</tr>
<tr>
<td>R-fluent but not always monitoring v – skipped wds</td>
<td></td>
</tr>
<tr>
<td>CAP – knew most concepts (Basic and Middle)</td>
<td></td>
</tr>
<tr>
<td>Burt – read wds by initial consonant.</td>
<td></td>
</tr>
<tr>
<td>Wrote ind. For 4 minutes then prompted</td>
<td></td>
</tr>
<tr>
<td>Knew basic HF wds</td>
<td></td>
</tr>
<tr>
<td>Knew most initial/end sounds.</td>
<td></td>
</tr>
<tr>
<td>Read at Level 6</td>
<td></td>
</tr>
<tr>
<td>***********************************************</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1ST</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>had built up a small bank of known wds</td>
<td></td>
</tr>
<tr>
<td>could hear and record most initial and final consonants</td>
<td></td>
</tr>
<tr>
<td>had early/mid CAP</td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

monitoring – with initial visual
at errors led by m and stu
attempts are made at unknown wds.

**********************************************

reading at level 16
Built his R+W voc
Able to have some independence in R+W. Using m and st and v information.
Has the basic and medial CAP
Burt 27- starting to problem solve on own.
Can use analogy to solve wds.
Phrasing/fluent when known text

**********************************************

Becoming more ind in R+W
CAP knows more than basics now medial skills
Has increased banks on W and R voc.
Can now hear most initial/medial and ending sounds
Reading has increased in level but S/C rate is 1:14. Not monitoring for v information and not problem solving

**********************************************

Using m and st but initial letter to problem solve
Engaged for short periods of time
Familiar reading is a pleasure for him
Has learned some letter/sound association
Need in and ability to say wd for himself (he’s better when he hears teacher say it)
Moved from non-reader to level 6/7
Can verbally compose complex sentences
Is reading at an appropriate level for disc., but his writing voc. Is below norm

Built a bank of HF wds

Uses m and st and initial v to problem solve visual

Some phrasing

Good S/C rate 1:5

Has learned to write 30-40 wds

Is led by v info then searches for structure and meaning

She S/C using v info.

Will read fluently on task

Has increased his knowledge abut letter sound ass.

Knowledge abut letters has increased

Using m and st

S/C using some v (initial)

Phrasing and good intonation on familiar R.

CAP-Initial and medial

Now 1:1 matching

C/C checking sounds with the printed text

Developed a small bank of HF “known” wds

Tries to orchestrate m, st and v information

Uses intonation and expression (Fluency)

Built bank of HF wds

He monitors
**REFLECTIVE PRACTITIONERS**

<table>
<thead>
<tr>
<th>S/C</th>
<th>Evidence</th>
<th>Based on Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>He</td>
<td>S/C – gives/shows evidence</td>
<td>Independent learners</td>
</tr>
<tr>
<td>HR</td>
<td>sounds consistent – most now</td>
<td>Early behaviors</td>
</tr>
<tr>
<td>When</td>
<td>S/C consistently uses a combination of m, st and v</td>
<td>Monitor</td>
</tr>
<tr>
<td>Can</td>
<td>easily compose</td>
<td>Search for info-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluent at level 16</td>
<td>Correct</td>
</tr>
<tr>
<td>Using m, st and predom. S/m and c/c’s using v info to S/C</td>
<td>Solve</td>
</tr>
<tr>
<td>In CAP sees all but high level</td>
<td></td>
</tr>
<tr>
<td>Could read 14-15 HF wds</td>
<td></td>
</tr>
<tr>
<td>Wrote 55 wds in 10 minutes – Independence</td>
<td></td>
</tr>
<tr>
<td>Using analogy, endings to problem solve</td>
<td></td>
</tr>
<tr>
<td>Can hear and record all sounds</td>
<td></td>
</tr>
<tr>
<td>****************************</td>
<td></td>
</tr>
<tr>
<td>Is reading phrased and fluent at every level</td>
<td></td>
</tr>
<tr>
<td>Burt could read 27 wds which puts her at______age.</td>
<td></td>
</tr>
<tr>
<td>In 10 minutes could write 52 words.</td>
<td></td>
</tr>
<tr>
<td>Fluent known most sound letter ass.</td>
<td></td>
</tr>
<tr>
<td>Uses analogy to solve words.</td>
<td></td>
</tr>
<tr>
<td>Directionality not an issue</td>
<td></td>
</tr>
<tr>
<td>****************************</td>
<td></td>
</tr>
<tr>
<td>S/C with m and st. Goes back and makes sure sentence “sounds right”</td>
<td></td>
</tr>
<tr>
<td>Using m and st more than v</td>
<td></td>
</tr>
<tr>
<td>3-5 wd phrasing</td>
<td></td>
</tr>
<tr>
<td>has a bank of known wds “28”</td>
<td></td>
</tr>
<tr>
<td>He enjoys story writing.</td>
<td></td>
</tr>
</tbody>
</table>

| **************************** |  |
Now sounding phrased
Mostly using initial v info
Building a bank of “known” wds
Can hear and record sounds on his own.

**********************************************

now using m and st and v info at pt of error
when error v
R is phrased
Has all but higher order CAP
Has built a good bank of HF words
HR sounds strong
Needs more work with writing

**********************************************

Some phrasing – using expression
Using m, st and v info to problem solve
S/C with more visual info
CAP – Early medial
Building a ban of HF “Known” wds
HR sounds slowly initial/final some vowels
At pt of diff makes multiple attempts searching for known chunks.
C/C – m and st with v info
Orchestrates using m and v and structural info
APPENDIX K

FOLLOW UP INTERVIEW

INITIAL RR PD – DECEMBER 2009

7. What did you learn about how to teach Reading?
8. What did you learn about how to teach Writing?
   – What do you now need to learn?
   – Good readers and writers in Grade 1 use many strategies. To be an effective reader,
     what does Marie Clay tell us that all students should be doing when reading?/writing?
9. Reading Recovery® is an early intervention focused on struggling readers and
   writers. How has your initial year of Reading Recovery® Professional Development
   helped your classroom literacy practice?
   – You might want to comment on observations (what to look for), assessment (for
     learning), evidence, (what are you able to see about the development of skills),
     strategic activity, (orchestration, self-extending system, acceleration, etc.)
10. What did you like about the professional development?
11. What didn’t you like about the professional development?
### Process

**Organization**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process that the child must follow</td>
<td>Work on behavior Reread in Literacy Lessons #1 page 40 Guidebook #2 p. 72 Evidence</td>
<td>Discuss a plan to alter behavior Reread the section – Taking words apart Go to guidebook #2-p. 136 - Cautions</td>
<td>Go to Literacy Lessons #2 and read that section Learn to look at print.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Theory**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning and structure that could be diff. And visual information</td>
<td>Prompting is necessary</td>
<td>Use the prompts as a call to action on the part of the child</td>
<td>Reading has as much or more to do with meaning and structure as it has to do with visual information</td>
<td>Why is the H/R sounds task important?</td>
</tr>
<tr>
<td>What would you expect to see at beginning…end…middle</td>
<td>Building the Foundations for a Self-Extending System.</td>
<td>Why the letter sort? About how words work.</td>
<td>Tap into the sources of information and teach the children to use them constructively to search, monitor, check and in the end problem solve</td>
<td>Independence</td>
</tr>
<tr>
<td>See if he is monitoring and will S/C</td>
<td>Reciprocal nature of R+W</td>
<td>Problem solving in R and W.</td>
<td>Get that lower processing of words to a higher level.</td>
<td>Strategic way to problem solve using meaning, structure and visual information to monitor, search, and ultimately problem solve.</td>
</tr>
<tr>
<td></td>
<td>Alphabet task-this is a discrimination task</td>
<td>Learn to check using m, st and visual information</td>
<td>Fast visual processing</td>
<td>Is she searching using meaning, structure and visual information?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is she searching using m, st and v information</td>
<td>Oral language is part of the reading process</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitoring for v information</td>
<td>Children have to access all three sources of information quickly to be efficient strategic readers and writers</td>
<td></td>
</tr>
</tbody>
</table>
REFLECTIVE PRACTITIONERS

<table>
<thead>
<tr>
<th>R+W is reciprocal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructing meaning</td>
</tr>
<tr>
<td>Orchestration of all sources of information</td>
</tr>
<tr>
<td>Reciprocal nature of R+W</td>
</tr>
</tbody>
</table>
### Observation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What did he learn today?</td>
<td>Teach her what to do</td>
<td>What is the child doing?</td>
<td>His processing in Familiar Reading</td>
<td>What do you have to teach him?</td>
</tr>
<tr>
<td></td>
<td>What will you teach tomorrow?</td>
<td>Then ask her to do it (prompt)</td>
<td>What have I taught today?</td>
<td>is slowed down by his consistent</td>
<td>What do you have to learn to do this?</td>
</tr>
<tr>
<td></td>
<td>What have you learned?</td>
<td>Hopefully she will do it herself</td>
<td>What am I going to teach tomorrow?</td>
<td>analysis of high frequency words</td>
<td>What did I teach today?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>These questions will help you to</td>
<td>Reading and Writing voc.</td>
<td>What did she learn from the writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>plan and to know where you are</td>
<td>Reflect on how you have taught</td>
<td>task?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>going.</td>
<td>your student or students to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>“know” the words</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Confusions – Be careful with the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>words you are breaking.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>How could you teach a reading</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>vocabulary?</td>
</tr>
</tbody>
</table>
**Practice**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing vocabulary-words to fluency</td>
<td>Concerned about writing</td>
<td>Demonstration</td>
<td>How to get the child processing visual information at a higher level</td>
<td>Let him monitor</td>
</tr>
<tr>
<td>Not using H and R sounds – child says word slowly</td>
<td>She was monitoring for herself</td>
<td>An economy of discussion</td>
<td>He can hear and record sounds in order</td>
<td>Confusions – Be careful with the words you are breaking.</td>
</tr>
<tr>
<td>The intro. Of the book</td>
<td>Work on punctuation</td>
<td>Practice the prompts</td>
<td>Phrasing in fluent reading is not as good as it should be</td>
<td>H/R sounds in words – say – hear- and record</td>
</tr>
<tr>
<td>Locate the word</td>
<td>Monitor for herself in R+W</td>
<td>Teach for a R+W vocabulary throughout the lesson</td>
<td>Study words within the lesson</td>
<td>Work on words throughout lesson – reciprocal</td>
</tr>
<tr>
<td>Independence in problem solving in writing</td>
<td>H/R sounds – she must be able to say and hear before she can record the sounds in words</td>
<td>Reciprocal nature of R+W</td>
<td>Teacher visual information</td>
<td>What should the child be able to do independently?</td>
</tr>
<tr>
<td>Doing a slow check in R+W</td>
<td>Written vocabulary – build a band of H/F words</td>
<td>Gather the evidence of strategic activity on the par of the child.</td>
<td>Learn to quickly write high utility words</td>
<td>Teach a writing voc.</td>
</tr>
<tr>
<td></td>
<td>Directionality could be an issue</td>
<td>Teacher is monitoring for him</td>
<td>Learning is all about change</td>
<td>Slow the child down to record letters</td>
</tr>
<tr>
<td></td>
<td>Introduce the H/R sounds in words task early</td>
<td>Hearing and Recording sounds</td>
<td>Practice fluency</td>
<td>Reading Vocabulary</td>
</tr>
<tr>
<td>H/R sounds in words – say word slowly.</td>
<td>reading is not knowing all the words in the text, but having way to get to these words.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompts – use them as a call to action</td>
<td>H/R sounds in words – say – hear-then record</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Robert Marzano, respected educational researcher, has proposed what he calls A New Taxonomy of Educational Objectives (2000). Developed to respond to the shortcomings of the widely used Bloom’s Taxonomy and the current environment of syllabus guidelines-based instruction, Marzano’s model of thinking skills incorporates a wider range of factors that affect how students think and provides a more research-based theory to help teachers improve their students’ thinking.

Marzano’s New Taxonomy is made up of three systems and the Knowledge Domain, all of which are important for thinking and learning. The three systems are the Self-System, the Metacognitive System, and the Cognitive System. When faced with the option of starting a new task, the Self-System decides whether to continue the current behavior or engage in the new activity; the Metacognitive System sets goals and keeps track of how well they are being achieved; the Cognitive System processes all the necessary information, and the Knowledge Domain provides the content.

**The Three Systems and Knowledge Self-System:**
- Beliefs About the Importance of Knowledge
- Beliefs about Efficacy
- Emotions Associated with Knowledge

**Metacognitive System:**
- Specifying Learning Goals
- Monitoring the Execution of Knowledge
- Monitoring Clarity
- Monitoring Accuracy
Cognitive System

<table>
<thead>
<tr>
<th>Knowledge Retrieval</th>
<th>Comprehension</th>
<th>Analysis</th>
<th>Knowledge Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall Execution</td>
<td>Synthesis</td>
<td>Matching</td>
<td>Decision Making</td>
</tr>
<tr>
<td></td>
<td>Representation</td>
<td>Classifying</td>
<td>Problem Solving</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Error Analysis</td>
<td>Experimental Inquiry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generalizing</td>
<td>Investigation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specifying</td>
<td></td>
</tr>
</tbody>
</table>

Knowledge Domain

- Information
- Mental Procedures
- Physical Procedures

Classroom Example

Anushka, a class three student is thinking about a birthday party she is going to attend this weekend when her teacher begins a math lesson. Anushka’s Self-System decides to stop thinking about the party and engage in the lesson. Her Metacognitive System tells her to pay attention and ask questions so she can do the assignment. Her Cognitive System provides her with the thinking strategies she needs to make sense of the teacher’s instructions. The mathematical knowledge about concepts and procedures makes it possible for her to complete the problems successfully. Each component of the New Taxonomy contributes to Anushka’s success at learning the math concept and skills of the lesson.

Knowledge Domain

Traditionally, the focus of most instruction has been in the component of knowledge. Students were assumed to need a significant amount of knowledge before they could think seriously about a subject. Unfortunately, in traditional classrooms, instruction rarely moved
REFLECTIVE PRACTITIONERS

beyond the accumulation of knowledge, leaving students with a mental file cabinet full of facts, most of which were quickly-forgotten after the final test. Knowledge is a critical factor in thinking. Without sufficient information about the subject being learned, the other systems have very little to work with and are unable to engineer the learning process successfully. A high-powered automobile with all the latest technological features still needs some kind of fuel to make it fill its purpose. Knowledge is the fuel that powers the thinking process.

Marzano identifies three categories of knowledge: information, mental procedures, and physical procedures. Simply put, information is the “what” of knowledge and procedures are the “how-to.”

Information

Information consists of organizing ideas, such as principles, generalizations, and details, such as vocabulary terms and facts. Principles and generalizations are important because they allow us to store more information with less effort by placing concepts into categories. For example, a person may never have heard of an akbash, but once someone knows that the animal is a dog, he knows quite a bit about it.

Mental Procedures

Mental procedures can range from complex processes, such as writing a term paper to simpler tasks such as tactics, algorithms, and single rules. Tactics, like reading a map, consist of a set of activities which do not need to be performed in any particular order. Algorithms, like computing long division, follow a strict order which does not vary by situation. Single rules, such as those covering capitalization, are applied individually to specific instances.

Physical Procedures

The degree to which physical procedures figure into learning varies greatly by subject area. The physical requirements necessary for reading may consist of no more than left-to-right eye movement and the minimal coordination needed to turn a page. On the other hand, physical and vocational education requires extensive and sophisticated physical processes,
REFLECTIVE PRACTITIONERS

such as playing tennis or building a piece of furniture. Contributing factors to effective physical processing include strength, balance, manual dexterity, and overall speed of movement. Many of the activities which students enjoy in their leisure time such as sports or electronic game-playing require refined physical procedures.

Cognitive System

The mental processes in the Cognitive System take action from the knowledge domain. These processes give people access to the information and procedures in their memory and help them manipulate and use this knowledge. Marzano breaks the Cognitive System down into four components: knowledge retrieval, comprehension, analysis, and knowledge utilization. Each process is composed of all the previous processes. Comprehension, for example, requires knowledge retrieval; analysis requires comprehension, and so on.

Knowledge Retrieval

Like the knowledge component of Bloom’s Taxonomy, Knowledge Retrieval involves recalling information from permanent memory. At this level of understanding, students are merely calling up facts, sequences, or processes exactly as they have been stored.

Comprehension

At a higher level, Comprehension requires identifying what is important to remember and placing that information into appropriate categories. Therefore, the first skill of comprehension, synthesis, requires the identification of the most important components of the concept and the deletion of any that are insignificant or extraneous. For example, a student learning about Alexander in India should bother to remember the route that Alexander took to enter India and the battle with King Porus but not how many weapons his army carried with them. Of course, what is considered important about a concept depends on the context in which it is learned, so the information that is stored about a topic would vary by situation and student.
REFLECTIVE PRACTITIONERS

Through *representation*, information is organized in categories that make it more efficient to find.

*Analysis*

More complex than simple comprehension, the five cognitive processes in Analysis are *matching, classifying, error analysis, generalizing, and specifying*. By engaging in these processes, learners can use what they are learning to create new insights and invent ways of using what they have learned in new situations.

*Knowledge Utilization*

The final level of cognitive processes addresses the use of knowledge. Marzano calls these processes Knowledge Utilization, or Using Knowledge. The processes of using knowledge are especially important components of thinking for project-based learning since they include processes used by people when they want to accomplish a specific task. Decision-making, a cognitive process involves the weighing of options to determine the most appropriate course of action. Problem-solving occurs when an obstacle is encountered on the way to achieving a goal. Sub-skills for this process include identification of and analysis of the problem.

*Metacognitive System*

The metacognitive system is the “mission control” of the thinking process and regulates all the other systems. This system sets goals and makes decisions about which information is necessary and which cognitive processes best suit the goal. It then monitors the processes and makes changes as necessary. For example, a middle-school student who is contributing to a virtual museum about different rocks first establishes the goals of what his Web page will have on it and what it will look like. Then he chooses what strategies he will use to find out what he needs to know in order to create the page. As he implements the strategies, he monitors how well they are working, changing or modifying how he is working in order to complete the task successfully. Research on metacognition, particularly in literacy
and mathematics, makes a convincing case that instruction and support in the control and regulation of thinking processes can have a strong impact on achievement (Paris, Wasik, Turner, 1991; Schoenfeld, 1992).

**Self-System**

As any teacher knows, providing students with instruction in cognitive strategies even with metacognitive skills, is not always enough to ensure that they will learn. Teachers also are often pleasantly surprised to discover that a student has accomplished a task that they considered to be far too difficult. These situations occur because at the root of all learning is the Self-System. This system is comprised of the attitudes, beliefs and feelings that determine an individual’s motivation to complete a task. The factors that contribute to motivation are: *importance, efficacy, and emotions.*

**Importance**

When a student is confronted with a learning task, one of her first responses is to determine how important the task is to her. Is it something she wants to learn or believes she needs to learn? Will the learning help her accomplish a pre-determined goal?

**Efficacy**

Efficacy, as defined by a developer of social learning theory, Albert Bandura (1994), refers to of self-efficacy face challenging tasks head-on, with the belief that they have the resources to be successful. These students become deeply engaged in these tasks, persist at working on the task, and overcome the challenges. Bandura describes some ways in which students can develop feelings of self-efficacy. The most powerful way is through successful experiences. The experiences must be neither too difficult nor too easy. Repeated failure undermines self-efficacy, but success at overly simple tasks fails to develop a sense of resilience necessary for persisting at difficult tasks.
REFLECTIVE PRACTITIONERS

Emotions

Although students cannot control their emotions related to a learning experience, these feelings have a huge impact on motivation. Effective learners use their metacognitive skills to help them deal with negative emotional responses and take advantage of positive responses. For example, a student with a negative emotional feeling about reading technical materials could decide to read his chemistry textbook when he is exceptionally alert, rather than just before he goes to sleep at night.

References


APPENDIX N

BLOOM'S TAXONOMY OF LEARNING DOMAINS

The Three Types of Learning

Revised edition by Lorin Anderson (a student of Bloom)
### Cognitive Domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Example and Key Words (verbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong>: Recall data or information.</td>
<td><strong>Examples</strong>: Recite a policy. Quote prices from memory to a customer. Knows the safety rules. <strong>Key Words</strong>: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.</td>
</tr>
<tr>
<td><strong>Comprehension</strong>: Understand the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.</td>
<td><strong>Examples</strong>: Rewrites the principles of test writing. Explain in one's own words the steps for performing a complex task. Translates an equation into a computer spreadsheet. <strong>Key Words</strong>: Comprehends converts, defends, distinguishes estimates, explains, extends, generalizes, gives an example, infers, interprets paraphrases, predicts rewrites, summarizes, and translates.</td>
</tr>
<tr>
<td>REFLECTIVE PRACTITIONERS</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **Application:** Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the work place. | **Examples:** Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.  
**Key Words:** applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses. |
| **Analysis:** Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences. | **Examples:** Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.  
**Key Words:** analyzes, breaks down, compares, contrasts, and diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers outlines, relates, selects, and separates. |
| **Synthesis:** Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure. | **Examples:** Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.  
**Key Words:** categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites,
REFLECTIVE PRACTITIONERS

<table>
<thead>
<tr>
<th>Evaluation: Make judgments about the value of ideas or materials.</th>
<th>Examples: Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Words</strong>: Appraises compares, concludes contrasts, criticizes critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, and summarizes, supports.</td>
<td></td>
</tr>
</tbody>
</table>

Affective Domain

<table>
<thead>
<tr>
<th>Category</th>
<th><strong>Example and Key Words (verbs)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving Phenomena: Awareness, willingness to hear, selected attention.</td>
<td><strong>Examples</strong>: Listen to others with respect. Listen for and remember the name of newly introduced people.</td>
</tr>
<tr>
<td><strong>Key Words</strong>: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.</td>
<td></td>
</tr>
<tr>
<td>Responding to Phenomena: Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond,</td>
<td><strong>Examples</strong>: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Know the safety rules and practices them.</td>
</tr>
<tr>
<td><strong>Key Words</strong>: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs.</td>
<td></td>
</tr>
</tbody>
</table>
or satisfaction in responding (motivation).

<table>
<thead>
<tr>
<th>REFLECTIVE PRACTITIONERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>practices, presents, reads, recites, reports, selects, tells, writes.</td>
</tr>
</tbody>
</table>

**Valuing**: The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.

**Examples**: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about.

**Key Words**: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.

**Organization**: Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system. The emphasis is on comparing, relating, and synthesizing values.

**Examples**: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self.

**Key Words**: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.
### Internalizing values

(characterization): Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner.

Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).

### Examples:

- Shows self-reliance when working independently.
- Cooperates in group activities (displays teamwork).
- Uses an objective approach in problem solving.
- Displays a professional commitment to ethical practice on a daily basis.
- Revises judgments and changes behavior in light of new evidence.
- Values people for what they are, not how they look.

### Key Words:

- acts
- discriminates
- displays
- influences
- listens
- modifies
- performs
- practices
- proposes
- qualifies
- questions
- revises
- serves
- solves
- verifies.
REFLECTIVE PRACTITIONERS

Psychomotor Domain

<table>
<thead>
<tr>
<th>Category</th>
<th>Example and Key Words (verbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception: The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.</td>
<td>Examples: Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet.</td>
</tr>
<tr>
<td>Key Words: chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.</td>
<td></td>
</tr>
<tr>
<td>Set: Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets).</td>
<td>Examples: Knows and acts upon a sequence of steps in a manufacturing process. Recognize one's abilities and limitations. Shows desire to learn a new process (motivation). NOTE: This subdivision of Psychomotor is closely related with the “Responding to phenomena” subdivision of the Affective domain.</td>
</tr>
<tr>
<td>Key Words: Begins displays, explains, moves, proceeds, and reacts, shows, states, volunteers.</td>
<td></td>
</tr>
</tbody>
</table>
Guided Response: The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.

Examples: Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds hand-signals of instructor while learning to operate a forklift.

Key Words: copies, traces, follows, react, reproduce, responds

Mechanism: This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.

Examples: Use a personal computer. Repair a leaking faucet. Drive a car.

Key Words: assembles, calibrates constructs, dismantles displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, and organizes sketches.

Complex Overt Response: The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance. For example, players often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a

Examples: Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano.

Key Words: assembles, builds, calibrates constructs, dismantles displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, and organizes sketches.

NOTE: The Key Words are the same as Mechanism, but will have adverbs or adjectives
football, because they can tell by the feel of the act what the result will produce.

<table>
<thead>
<tr>
<th><strong>Adaptation</strong></th>
<th><strong>Examples</strong></th>
<th><strong>Key Words</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills are well developed and the individual can modify movement patterns to fit special requirements.</td>
<td>Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Perform a task with a machine that it was not originally intended to do (machine is not damaged and there is no danger in performing the new task).</td>
<td>adapts, alters changes, rearranges, reorganizes, revises, and varies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Origination</strong></th>
<th><strong>Examples</strong></th>
<th><strong>Key Words</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.</td>
<td>Constructs a new theory. Develops a new and comprehensive training programming. Creates a new gymnastic routine.</td>
<td>arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.</td>
</tr>
</tbody>
</table>
CONTEXT

**Standard:** Learning Community

**Definition:** Staff development that improves the learning of all students’ organizes adults into learning communities whose goals are aligned with those of the school and district.

**Roles**

Learning community, communities of practice-commitment to the norms of continuous improvement and experimentation and engage their members in improving their daily work to advance the achievement of school district and school goals for student learning.

Learning teams may be of various sizes and serve different purposes. May meet once or twice a month to reflect on its work, engage in appropriate learning, and assess its progress. Improve teaching and learning. Consist of four to eight members, assist one another in examining the standards students are required to master, planning more effective lessons, critiquing student work, and solving the common problems of teaching. Determine areas in which additional learning would be helpful, read articles, attend workshops or courses, and invite consultants to assist them in acquiring necessary knowledge or skills. Participants observe one another and conduct other job-related responsibilities.

**Reading Recovery**

Different Learning teams- size, serve different purpose, monitor student growth daily, monthly, yearly, monitor teaching daily

Continuing Contact Group, meet about once a month, can contact each other by e-mail, contact with tutor as necessary. Teach a minimum of 2 students to refine practice of teaching children at risk.

Training group that meets 18 times during the year. Teach 4 students to put into practice what they have learned.

Teacher visits – At least 5 times during the year.
Reflection Practitioners

Context (continued)

**Standard:** Leadership

**Definition:** Staff development that improves the learning of all students requires skillful school and district leaders who guide continuous instructional improvement.

**Roles**

Skillful leaders establish policies and organizational structures that support ongoing professional learning and continuous improvement. They ensure and equitable distribution of resources to accomplish district goals and continuously improve the school or district’s work through the ongoing evaluation of staff development effectiveness in achieving student learning goals.

**Reading Recovery**

Superintendent

Director

Coordinator

Principal

School Team

Teacher Leader

My role in leadership from Standards and Guidelines –Accreditation process
REFLECTIVE PRACTITIONERS

PROCESS

**Standard:** Data-Driven

**Definition:** Staff development that improves the learning of all students’; uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.

**Roles**

1. Data on individual tests can be analyzed to learn how much students advanced in one year as well as particular strengths and weaknesses associated with the focus of the test.

2. The design and evaluation of staff development efforts, both for formative and summative purposes.

3. At the classroom level, as teachers gather evidence of improvement in student learning to determine the effects of their professional learning on their own students.

**Reading Recovery**

Student Data

Teacher Data

Follow-up and monitoring of students and teachers progress.
REFLECTIVE PRACTITIONERS

PROCESS (continued)

**Standard:** Evaluation

**Definition:** Staff development that improves the learning of all students; uses multiple sources of information to guide improvement and demonstrate its impact.

**Roles**

Well-designed staff development evaluation can address the scepticism by serving two broad purposes.

Improving the quality of current staff development efforts, and (2) determining the effects of staff development in terms of its intended outcomes.

It should also focus on teacher’s acquisition of new knowledge and skills, how that learning affects teaching and in turn how those changes in practice affect student learning.

**Reading Recovery**

Yearly report

School Reports

Teacher Reports

Provincial Reports

Canadian Reports
REFLECTIVE PRACTITIONERS

PROCESS (continued)

**Standard:** Researched Based

**Definition:** Staff development that improves the learning of all students; prepares educators to apply research to decision making.

**Roles**

It is critical that teams of teachers and administrators take the time to study methodically the research that supports the claims made by advocates of a particular approach to instructional improvement.

**Reading Recovery**

Marie Clay’s research and works.

Journal of Reading Recovery

Literacy Journal

Action Research – analysis of work

CIRR

**Standard:** Design

**Definition:** Staff development that improves the learning of all students; uses learning strategies appropriate to the intended goal.

**Roles**

That means that staff development leaders and providers must be aware of and skilful in the application of various adult-learning strategies.

Collaborative lesson design, examination of student work, immersion in work, case studies, action research, study groups, professional networks, live or video models of new instruction strategies, demonstration, coaching, large group, follow-up sessions.

Study of the subject with a content expert.

**Reading Recovery**

Reading Recovery Design
REFLECTIVE PRACTITIONERS

PROCESS (continued)

**Standard:** Learning

**Definition:** Staff development that improves the learning of all students; applies knowledge about human learning and change.

**Roles**

The means by which the learning occurs

PD mirrors as closely as possible the methods teachers are expected to use with their students.

PD should assist educators in moving beyond comprehension of the surface features of a new idea or innovation to a fuller and more complete understanding of its purposes, critical attributes, meaning, and connection to other approaches.

PD inst includes opportunities to see, hear, and do various actions in relation to the content. It is also important that educators are able to learn alone and with others.

Recognition of life stage differences may also help staff development leaders in tapping educators’ strengths and talents, such as asking skillful veteran teachers to serve as mentors or coaches for their peers.

**Reading Recovery**

Group sessions: teaching, discussions, investigation, study, reflections, building on understandings

Individual sessions: teaching, discussions, investigation of teaching

Video analysis of lessons – metacognition
REFLECTIVE PRACTITIONERS

CONTENT

**Standard:** Equity

**Definition:** Staff development that improves the learning of all students; prepares educators to understand and appreciate all students, create safe, orderly, and supportive learning environments, and hold high expectations for their academic achievement.

**Roles**

Effective educators know and demonstrate appreciation for all their students. Through their attitudes and behaviors, they establish learning environments that are emotionally and physically safe, communicate high expectations and build quality interpersonal relationships.

**Reading Recovery**

Student Selection, Three positive outcomes of Reading Recovery, Teaching environment
Standard: Quality Teaching

Definition: Staff development that improves the learning of all students; deepens educators’ content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of assessments appropriately.

Roles

Have a deep understanding of the subjects they teach.

Use appropriate instructional methods.

Apply various assessment strategies.

Extended institutes with follow-up activities, participate in face-to-face networks, experience firsthand as learners the instructional approaches they in turn will be using, participate in study groups, visit or watch lessons, observe demonstration lessons, coaching.

Reading Recovery

Study of Reading and Writing Theory – sessions. What is the theory?

Study of appropriate instructional methods. Design of lesson. Why designed that way?

Assessment methods: observation survey, running records, analysis of RR, analysis of writing.

Study of good reader behaviors.

Standard: Family Involvement

Definition: Staff development that improves the learning of all students; provides educators with knowledge and skills to involve families and other stakeholders appropriately.

Roles

Create a partnership between the school, the home, and the community.

Reading Recovery

Letter to home, Meeting with parents, Invite to sessions/lessons.

Notes home, Reading and Writing.
Writing vocabulary – Change Over Time

<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th>C</th>
<th>P</th>
<th>S</th>
<th>PM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; intake</td>
<td>20</td>
<td>25</td>
<td>21</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>2-24 range</td>
<td>3-30 range</td>
<td>2-26 range</td>
<td>5-23 range</td>
<td>15-23 range</td>
<td>2-30 range</td>
</tr>
<tr>
<td></td>
<td>On average 1&lt;sup&gt;st&lt;/sup&gt; intake had 21 words. Some students began with 2 words, while some students ended with 30 words. The mean was 21 words.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; intake</td>
<td>31</td>
<td>34</td>
<td>29</td>
<td>28</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>6-41 range</td>
<td>22-46 range</td>
<td>8-34 range</td>
<td>4-34 range</td>
<td>9-52 range</td>
<td>4-52 range</td>
</tr>
<tr>
<td></td>
<td>On average 2&lt;sup&gt;nd&lt;/sup&gt; intake had 33 words. Students entered with 4 words and some exited with 52 words. The mean was 33.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A range of 30 to 52 words exists between the two periods of time.

The second intake has improved by 22 words over the first intake. The first intake had a range of 2-30 words while the 2^{nd} intake had a range of 4 to 52 words. The beginning vocabulary range was similar in nature and would not explain the gain between the two groups.

**Summary – Average growth in Reading Levels**

Term 1, term 2, term 3

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>P-M</th>
<th>Ply.</th>
<th>Dru.</th>
<th>Cent.</th>
<th>Total</th>
<th>Range</th>
<th>Average</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.5</td>
<td>4</td>
<td>5</td>
<td>4.5</td>
<td>4</td>
<td>22/84</td>
<td>4 - 5</td>
<td>4.4</td>
<td>26%</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>27/84</td>
<td>5 - 6</td>
<td>5.4</td>
<td>32%</td>
</tr>
<tr>
<td>3</td>
<td>6.6</td>
<td>8</td>
<td>9.5</td>
<td>3</td>
<td>8</td>
<td>35/84</td>
<td>3 - 9.5</td>
<td>7</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>84</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
Appendix Q

The following links provide needed detail to respond to Reading Recovery critics.

Reading Recovery Council of North American (February 1, 2011)
*Dispelling Misrepresentations and Misconceptions About Reading Recovery* (Full Response)(One-Page Abstract Only)

**Response to:**


Allington, Richard (February 14, 2007). *Think Tank Review of Whole Language High Jinks* Education Policy Studies Laboratory. Published online.

**Response to:**


**Response to:**


*One to One vs. Two-to-One Instruction: A Response to Iversen, Tunmer, and Chapman.*

**Response to:**


*Research Findings and Recommendations: A Response to Elbaum et al. (2000) Meta-Analysis of One-to-One Interventions*

**Response to:**

REFLECTIVE PRACTITIONERS

Schwartz, R. M. (2005) *The Effectiveness of Early-Intervention Tutoring Programs—When is a Research Brief Too Brief?*

**Response to:**


**Response to:**

Internet letter distributed to members of Congress in Spring 2002.


**Response to:**

Internet letter distributed to members of Congress in Spring 2002. Signed by 31 academics.

Pinnell, G. S. (1999) *Comments in Response to Critics*

**Response to:**

Grossen, B., & Coulter, G. “Reading Recovery: An evaluation of benefits and costs: The claims versus the facts”. Published online.

Pinnell, G. S., & Moriarty, D. J. (1999). *Open letters to the editor of Investors Business Daily*

**Response to:**


Visit the International Data Evaluation Center (IDEC) website for evaluation information at www.idecweb.us