Linking Theory to Practice: Understanding How Two Reading Recovery Teachers' Reflections Inform their Teaching Practices

Lydia Criss Mays

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The Dissertation Advisory Committee and the student’s Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

Diane Truscott, Ph.D.
Committee Chair

Joyce E. Many, Ph.D.
Committee Member

Ramona Matthews, Ph.D.
Committee Member

Barbara Meyers, Ph.D.
Committee Member

Floretta Thornton-Reid, Ph.D.
Committee Member

Barbara Meyers, Ph.D.
Chair, Department of Early Childhood Education

R. W. Kamphaus, Ph.D.
Dean and Distinguished Research Professor
College of Education
AUTHOR’S STATEMENT

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Lydia Criss Mays
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All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is:

Lydia Criss Mays
3767 Vermont Road
Atlanta, GA 30319

The director of this dissertation is:

Dr. Diane Truscott
Department of Early Childhood Education
College of Education
Georgia State University
Atlanta, GA 30303-3083
VITA
Lydia Criss Mays

ADDRESS:  
3767 Vermont Road
Atlanta, GA 30319

EDUCATION:  
Ph.D.  2009  Georgia State University
Early Childhood Education

M.S.  2002  University of Tennessee, Knoxville
Early Childhood Education

B.S.  2001  University of Tennessee, Knoxville
Human Ecology

PUBLICATIONS:

Atlanta, GA: American Cancer Society.

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*University and School Connections: Research Studies in Professional

Development school partners. *Journal of the Georgia Association of Teacher
Education, 17*(1), 32-42.

PRESENTATIONS:


PROFESSIONAL SERVICE:

- **2007-2008** Guest Speaker in Educational Specialist Course
- **2006-2007** Designed and Hosted Urban Graduate Research Institutes for the College of Education
- **2006-2007** Guest Speaker in Undergraduate ECE Literacy Course
- **2006** Founding member of Early Childhood Education Student Support Group, Georgia State University
- **2005-2006** Teacher Induction Committee, Georgia State University
- **2005** Editorial Committee, Georgia State University, Teacher Education Yearbook
- **2005-2006** ECE student representative to the Graduate Admissions Appeals & Exceptions Committee, Georgia State University
ABSTRACT

LINKING THEORY TO PRACTICE: HOW TWO READING RECOVERY TEACHERS’ REFLECTIONS INFORM THEIR TEACHING PRACTICES

by

Lydia Criss Mays

Using a grounded theory approach to investigate the multidimensional reflections of two Reading Recovery teachers, this inquiry responds to calls for research on reflection and provides information for the field of education in understanding the nature of teachers’ reflections and how they inform teaching practices. Reading Recovery is a progressive intervention program which brings the lowest performing readers and writers to average levels of achievement in twelve to twenty weeks through daily, thirty minute one-on-one tutoring sessions that follow the same lesson pattern daily. Reading Recovery teachers are carefully trained to use reflection to design, implement, and observe children’s reading and writing practices to accelerate their reading and writing skills. To investigate the nature of participants’ reflections and how those reflections informed their teaching practices the data sources, collected over eight weeks, for each participant included field notes from seventeen observations, two semi-structured interview transcripts, thirty-six course documents, and two member checks transcripts. Open coding, memoing, and axial coding were used to examine all data sources. Further, each of the three dimensions of reflection, time, type, and context, were accounted for to fully explore participants’ reflections. Three interrelated major themes connected to the nature of Reading Recovery teachers’ reflectivity and practice were identified: (1) participants’
reflections are situated within the contextual framework of Reading Recovery and inform practices by serving as a roadmap to scaffold individualized instruction and examine personal philosophies of teaching and instructional assumptions; (2) Teacher identity as a reflective practitioner is a natural outcome participants and fosters the interconnectedness of practice and automaticity in their reflective practices; and (3) Systematic observations of the child during instruction focus on actions of the child and themselves as a teacher and serve as a trigger for reflection in a data-driven response sequence linking theory to practice. This study offers insight into how reflective practices of teachers of reading may be fostered through teacher education and into their own teacher development by linking their theoretical perspectives to their teaching practices.
LINKING THEORY TO PRACTICE: UNDERSTANDING HOW TWO READING RECOVERY TEACHERS’ REFLECTIONS INFORM THEIR TEACHING PRACTICES
by
Lydia Criss Mays

A Dissertation

Presented in Partial Fulfillment of Requirements for the Degree of Doctor of Philosophy in Early Childhood Education in the Department of Early Childhood Education in the College of Education Georgia State University

Atlanta, GA
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CHAPTER 1

INTRODUCTION

Being successful in today’s classroom goes beyond a one-size-fits all approach to planning and instruction (Delpit, 1995; Duffy, 2002; Larrivee, 2000). Teachers must know the necessary routines for each school day; but also be able to improvise and adapt their teaching practices, moment to moment, day to day (Fox, Brantley-Dias, & Brendan, 2007). Madelyn Hunter (1986), in her research in the early 80’s found the most effective teachers to be excellent decision-makers, both on-the-spot and in their abilities to reflect on their students and their actions. Highlighting results from her Napa Project research where she analyzed the effectiveness of teachers decision-making to bridge theory to practice, she found teacher reflection¹ to play a role in increased student success and teacher self-efficacy.

More recently, researchers have highlighted the growing dynamics and complexities in 21st century classrooms affecting teachers’ decision-making: increasing numbers of diverse students (Darling-Hammond, 2006; Gee, 2001; Lee, 2002; Truscott & Watts-Taffe, 2003; Slavin & Chueng, 2005); state mandated curriculums and programs (Cochran-Smith, 2005; Delpit, 1995; Hilliard, 2000; Lee, 2002); heightened public pressure for teachers to conform and comply to educational agendas (Apple, 2006; Cochran-Smith, 2005; Cuban, 1993; Darling-Hammond, 2006; Duffy, 2002; Hilliard, 2000).  

¹ Reflection is defined for this early discussion as purposeful thinking about an action or situation before, during, or after an act.
To combat these ever-increasing demands and changes it is necessary for teachers to act as social mediators, learning facilitators, and reflective practitioners (Duffy, 2002; Larrivee, 2000; Rogoff, 2003). “Being able to function in these roles begins with teacher self-awareness, self-inquiry, and self-reflection” (Larrivee, 2000, p. 293). Reflection provides a space for teachers to go beyond pedagogical competence and “possess a sense of mission that allows them to maintain an independent stance in the face of pressures to conform and comply” (Duffy, 2002, p. 339). While teacher reflection appears to play an important role in effective decision-making, as a community, we have yet to examine or come to an understanding about the unique nature of teachers’ reflections and how those reflections inform teaching practices. In the following sections I outline the significance of my research on the nature of teachers’ reflections and how those reflections inform their teaching practices.

Problem Statement

In the past 20 years calls for improving education have grown incessantly (Siegel, 2002). National educational agendas have been passed from administration to administration, reflecting a concern for the state of education. President George H. Bush enacted national educational goals in the form of National Goals 2000. President Bill Clinton endorsed aggressive state standards and President George W. Bush signed into law No Child Left Behind (NCLB) raising state standards and implementing consequences for standards not met. President Barrack Obama has discussed in detail significant changes to NCLB, many of which should implemented within the next few years. And, while these educational agendas, most specifically NCLB, have helped keep education in a national spotlight, it has resulted in the narrowing of school curriculum,
marginalization of teacher input, and devaluing of the role of teacher reflection in the
decision-making process (Siegel, 2007).

Interestingly though, the most successful teachers in today’s classroom think and
teach beyond the parameters of restrictive, mandated programs and standards required in
schools (Duffy, 2002; Larrivee, 2000). To be an effective teacher one must be more than
a “robot” regurgitating scripted lessons (Cochran-Smith, 2005; Hilliard, 2000); she/he
must remain fluid, making decisions by reflecting on and integrating and modifying skills
to fit specific contexts, eventually resulting in new strategies (Larrivee, 2000). Knowing
what to teach when, how to teach it and why, and for how long and to what degree,
requires deliberate decision-making as teachers attempt to maximize students’ learning
(Wold, 2003). These are challenges even the most experienced teachers face. Addressing
the unique needs of students is paramount to their success in school; furthermore,
addressing these unique needs within the content area of reading, deemed critical to the
development of children, is even more complex (Atwell, 1998; Clay, 2005; Fountas &
Pinnell, 2006; RAND group, 2002; Stahl, 2006).

Teaching reading is an interactive process; one where teachers are constantly
gauging a child’s needs and abilities, planning and adapting the activity, and making
choices about the text (Clay, 1993b; Duffy, 2002; Morrow, Tracey, Woo, Pressley, 1998;
RAND Group, 2002; Rodgers, 2004). Effective teachers of reading must observe the
relationship of their students in the context of the activity and then make decisions
regarding those employed processes. These decisions are dependent upon teachers’
knowledge of reading development and their ability to reflect on strategies to teach
students (RAND Group, 2002). In their extensive research on young children’s reading
development and the decision-making process of teachers, the RAND study group designed a triadic model to highlight the dynamic ways teachers must think about the reading development of young children. This heuristic model illustrates the complex relationship of different dimensions that influence children’s reading development, as well as, the thinking that teachers of reading must engage in to effectively meet the needs of students.

Figure 1. Dimensions of Reading Comprehension
The unique needs of the student are paramount, as well as the strategies teachers choose to employ and the texts or interactions they use to teach the child to read. This interactive nature of teaching reading is possible through teachers’ abilities to reflect on the interconnectedness of the child’s actions related to the activity and text (Duffy, 1991).

**Purpose**

It is widely documented that children who fail to succeed in learning to read in their early years of schooling often have difficulties in all subjects because of the interconnectedness of reading to all other content areas. In many cases, this delay can lead to poor self-esteem, high rates of frustration, behavioral problems, and school dropout (Au, 1998; Clay, 1991; Delpit, 1995; Gee, 2001; Pressley et al., 1998). Few literacy programs have had as much success teaching young children to read and write as Reading Recovery; a progressive intervention program foundationally built on the premise that teacher reflection is key to successfully teaching young children to read and write (Center, Wheldall, Freeman, Outhred, McNaught, 1995; Iversen & Turner, 1993; Pinnell, 1989; Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1993; Quay, Steele, Johnson, Hortman, 2001; Schwartz, 2005). Reading Recovery is an early intervention literacy program which accelerates reading development for first-grade students performing below grade-level. Classroom lessons are supplemented with one-on-one tutoring sessions during the school day. The late Marie Clay (1991), founder of Reading Recovery, stood firm in her contention that the success of Reading Recovery hinged upon teachers keen observations of students engaged in reading and writing and using these systematic observations to reflect on their own practices to meet the unique needs of each student. From her roots as a developmental psychologist, Clay bridged her understanding
of the cognitive development of children in the act of learning to read and write to her research on young children and her experiences in classrooms to design Reading Recovery as a theoretical framework within which the development of reading and writing evolve from the integration of many behaviors that are highly individualized for each student. Clay contends:

> Observing reading behavior informs a teacher’s intuitive understanding of cognitive processes and her teaching improves. She has a way of gathering data during teaching and she has a way of keeping her explanations of her teaching in line with what her pupils actually do. So every teacher builds a kind of personal theory of what the surface behaviors in reading imply about the underlying cognitive process. (p. 232)

Thus, teachers instructional decisions are based upon their knowledge related to literacy development and reflection on the different learning styles and strategies of children (Askew, Fountas, Lyons, Pinnell, & Schmitt, 2000; Cox & Hopkins, 2006). While Reading Recovery is one of the leading programs increasing reading and writing skills in young students today (Schwartz, 2005), there has been no research conducted that investigates the nature of Reading Recovery teachers’ reflections and how those reflections inform their teaching practices.

In addition to our lack of understanding about the nature of teacher’s reflections and the way those reflections inform teaching practices research on reflection typically focuses on only one of three dimensions: time, type or context (Calderhead, 1987; Dewey, 1933; Edwards & Hensien, 1999; Hatton & Smith, 1995; Schön, 1987; Van Manen, 1995; Valli, 1997; Zeichner & Liston, 1996). *Time* refers to when reflection occurs: prior to an action (Van Manen, 1995), during an action (i.e., Schön’s reflection-in-action), or following an action (i.e. Schön’s reflection-on-action). *Type* corresponds to the various content of reflection (Griffiths & Tann, 1992; Hatton & Smith, 1995; Van
Manen, 1995; Valli, 1997). Context highlights the situational background where reflection occurs and with whom, if anyone, reflection took (or takes) place with (i.e., individually, within a small group of teachers) (Howard, 2003; Nieto, 2005; Webb, 2001). Examining reflection within one, or even two, of these dimensions fails to illuminate and explain the act in full. I believe reflection cannot be understood without examining the act as bound by all three dimensions: time, type, and context.

Therefore, the purpose of this study was three-fold: (1) to examine the historical underpinnings of reflection, bound by time, type and context, and its influence on current applications of teacher reflection; (2) to understand the nature of Reading Recovery teachers’ multidimensional reflections; and (3) to examine how the reflections of Reading Recovery teachers informed their teaching practices.

Significance

Teacher reflection has been shown to be essential for meaningful professional growth and learning (Burden, 1990; Fox, Brantley-Dias, & Calandra, 2007; Van Manen, 2001; Zeichner & Liston, 1996). It has been shown to strengthen teachers’ commitment to their students (Grant, 2001), transform their practices (Asher, 2007; Clay, 1991; Friedland & George, 2006; Merriam & Caffarella, 1999; Mezirow, 1997; Roskos, Vukelich, & Risko, 2001; Zeichner & Liston, 1996), provide a springboard for discussion leading to a critical examination of themselves and their teaching practices (Bambino, 2002; Dunne, & Honts, 1998; Nieto, 2005; Webb, 2001), facilitate professional and personal growth (Davis, 2006; Dewey, 1933; Palmer, 1998, Zeichner & Liston, 1996), influence chosen teaching strategies (Hall, 2006) and improve student achievement (Taylor, Pearson, Peterson & Rodriquez, 2005). And, although it is widely agreed that
teacher reflection is important for teacher growth and student success, the exact nature of
teacher reflection and *how* reflection, bound by the dimensions of time, type and context,
informs a teacher’s practice is not yet clearly understood. This absence leaves important
theoretical and pedagogical questions: How does reflection inform teaching? How does
reflection inform lesson implementation? How does reflection inform a teachers’ chosen
method or strategy to teach a child to read? Presently, we have no definitive answers for
the educational community to clarify *how* teacher reflection is informing teaching
practices. In this study, I examined the nature of Reading Recovery teachers’ reflections
multidimensionally and how those reflections informed their teaching practices.
Conducting this research within the context of Reading Recovery provided an
opportunity to examine reflective practices of effective teachers on a microlevel. On a
macrolevel, this research provides a springboard for discussion on the interactive nature
of reading and the ways teacher reflection plays a role in this process.

**Research Questions**

Reading Recovery is a systematic and comprehensive program that encompasses
professional development, a network of professional support for teachers and
administrators responsible for program implementation, and a research and evaluation
component to monitor program effectiveness and ensure accountability (Cox & Hopkins,
2006). Because of this training, support, and subsequent professional development
meetings throughout the school year, there is little variation among the implementation of
lessons between teachers (Clay & Cazden, 1990). When discussing the need for teachers
to be able to address the natural diversity among children and their different strategies
used to read and write, Clay (1998) said, “Whether [the teacher’s] knowledge helps or
hinders children’s literacy growth and development depends on the tentativeness and reflective practice of the teachers” (pp.95-96). Thus a cornerstone of the success of Reading Recovery teachers is their ability to reflect on their own practice to meet the needs of their students. For this study I had two goals. The first was to describe the nature of Reading Recovery teachers’ reflections. The second was to examine how the reflections of Reading Recovery teachers informed their teaching practices. The following questions guided the inquiry:

1. What is the nature of Reading Recovery teachers reflections examined multidimensionally?

2. How do the reflections of Reading Recovery teachers inform their teaching practices?

Nature of the Study

To examine my questions, I applied a naturalistic qualitative research design employing grounded theory strategies to collect and analyze data. Additionally, I used specific grounded theory strategies to examine my data, as this type of research often reflects an interest in understanding a process (Glasser & Strauss, 1999; Schram, 2005). I purposefully selected two female teachers from Kingston County (all names are pseudonyms), the largest school district in a Southeastern state. Each participant represented a different school where the Reading Recovery program varied in size and faculty. One participant was from a school where she is the only Reading Recovery teacher; while another participant worked in a school where she taught with six other Reading Recovery teachers.
I observed each Reading Recovery teacher teaching a thirty-minute lesson to a child twice a week for eight weeks (16 observations each). Initially, observations focused primarily on recording descriptive fieldnotes, capturing everything the teacher did during the lesson. As data collection and analysis progressed, observations became more focused and selective, examining how reflection from the previous day or weeks informed her teaching and planning. Additionally, I collected various teacher artifacts (see Appendixes A-C) Reading Recovery teachers complete during and following lessons that captured reflection-in and on-action. I observed one of my participants during a continuing education contact session and the other during her teacher leader contact session. During these meetings, teacher leaders scaffold Reading Recovery teachers’ reflections, making collaborative reflection a cornerstone of these conversations. The specific artifacts and observation techniques are fully described in chapter three. Furthermore, I interviewed my participants twice during data collection to understand how they view the role of reflection in their teaching. I conducted member checks with my participants twice during data collection and data analysis phases to help confirm and (or) disconfirm my own interpretations and conclusions of emergent themes and findings.

Data collection and analysis were guided by grounded theory techniques (Charmaz & Mitchell, 2001; Glaser & Strauss, 1999; Strauss & Corbin, 1998). Grounded theory methods preserve an open-ended approach to studying the empirical world while adding rigor to research by building systematic checks into both data collection and analysis (Charmaz & Mitchell, 2001). Using these methods assisted in focusing, structuring, and organizing data. Grounded theory techniques require data collection that enhances both a breadth and depth of understanding (Glaser & Strauss, 1999). Data were
analyzed using open coding, memoing, and axial coding. These coding processes are described in chapter three.

Definitions

The following terms and respective definitions are used in this study:

*Clay’s theory of reading:* Reading is viewed as a psycholinguistic process in which the reader constructs meaning from print (Clay, 1979; 1991; Pinnell, 1989). Clay (1991) defined reading as a "message-gaining, problem solving activity, which increases in power and flexibility the more it is practiced." Clay states that within the "directional constraints of the printer's code, language and visual perception responses are purposefully directed in some integrated way to the problem of extracting meaning from text, in sequence, to yield a meaningful communication, conveying the author's message" (Clay, p. 6).

*Clay’s theory of reading acquisition:* Reading is a "process by which the child can, on the run, extract a sequence of cues from printed texts and relate these, one to another, so that he can understand the precise message of the text (Clay, 1991, p. 13)." In order to master this process, the child must have good control of oral language, developed perceptual skills, the physiological maturity and experiences that allow the child to coordinate what s/he hears in language and sees in print, and enough hand-eye coordination so s/he can learn the controlled, directional patterns required for reading (Clay, 1979).

*Context:* the situational background where reflection occurs and with whom, if anyone, reflection took (or takes) place with (i.e., individually, within a small group of teachers)
**Coverage area:** number of Reading Recovery teachers housed in a school (i.e., low coverage represents schools with one Reading Recovery teacher, high coverage is represented by the presence of five to seven Reading Recovery teachers)

**Inform:** Any change occurring in Reading Recovery teachers’ practice linked to reflection.

**Reading Recovery:** an early intervention reading and writing program for low-achieving (typically the lowest 20%) first-grade students (Clay, 1991; 1998; Cox & Hopkins, 2006)

**Reading Recovery teacher:** a school teacher trained in a yearlong university training program and ongoing professional development to implement the Reading Recovery program with struggling readers and writers (Clay 1998). Reading Recovery teachers spend half of their contracted time implementing the Reading Recovery model one on one with students and the other half of their time engaged in activity accepted by their school system (i.e., a shared classroom model, serving small groups, etc.) Reading Recovery teachers are qualified for the program based on the standards of their country or state for certification.

**Reflection:** Reflection is purposeful thinking prompted by a sense of uncertainty, unease, surprise, boredom or success (Dewey, 1933), bound multidimensionally by the time, type, and context within which it occurs. It is cyclical, focused on any belief or practice due to past experiences and influenced by prior knowledge.

**Teacher Leader:** teachers who hold a Master’s degree and have been trained in a yearlong university training program and participant in ongoing professional
development to support, train and scaffold reflection of Reading Recovery teachers at school-based teacher training sites

*Teaching practices:* the planning and teaching by Reading Recovery teachers

*Time:* instance a reflection occurs

*Type:* various content of reflections

Summary

To summarize, this research had three primary aims. The first was to highlight the historical underpinnings of reflection to glean a more common language related to the way reflection is understood in education today. The second was to examine the nature of Reading Recovery teachers’ reflections multidimensionally. And third, I examined how the reflections of Reading Recovery teachers’ informed their teaching practices. This research is important, as I respond to recent calls for increased accountability of teachers and increased reading and scores of students (Department of Education, 2001). Before describing methodology used for this study, in the following chapter I provide a comprehensive review of the research in the field on reflection.
CHAPTER 2
REVIEW OF THE LITERATURE

Many scholars contend reflective practice is the “hallmark” of professional competence for teachers (e.g., Cole & Knowles, 2000; Davis, 2006; Hatton & Smith, 1995; Jay, 2003; Larrivee, 2006, 2008; Osterman & Kottkamp, 2004; Reagan, Case, & Brubacher, 2000; Schön, 1987; Smyth, 1992; Zeichner & Liston, 1996). In general, researchers (Cruickshank, 1987; Hatton & Smith, 1995; Sparks-Langer et al., 1990; Zeichner & Liston, 1996) have agreed that developing and fostering reflective practices of teachers is beneficial to themselves and their students. Yet, a pressing concern within the field of education in the 21st century is the escalating pressure to be accountable for students reaching state and nationally mandated measures of performance, increasing the likelihood of teachers using strategies that resemble a more traditional, one-size fits all approach to teaching which may come at the expense of ongoing reflection on teaching practices (Darling-Hammond & Sclan, 1996; Delpit, 1995; Larrivee, 2008; Lortie, 2002; Zeichner & Liston, 1996).

Using a one-size-fits all approach to teach may be detrimental to the reading development of young children (Duffy, 2002; Dyson, 2002; Gregory & Williams, 2000; Lankshear & Knobel, 2003; Luke & Luke, 2001). It is widely understood that teaching students to become readers requires teachers to attend specifically to student’s actions and adapt, or scaffold, their teaching related to these observations (Clay, 2001; Duffy, 2002; Fountas & Pinnell, 2006; RAND Group, 2002; Rodgers, 2004). Additionally,
teachers of reading must be able to combine multiple methods and materials rather than adhere to one particular program or a single approach (Duffy, 1997). Researchers have found the most successful teachers of reading engage in reflection that aids in their decision-making process resulting in more successful teaching practices (Duffy, 2002; Mazzoni & Gambrell, 2003; Roskos, Vukelich, & Risko, 2001).

In addition, a powerful way for literacy teachers to work with students is in the form of one-to-one tutoring because they can customize instruction to meet the individual strengths and needs of the child (Rodgers, 2004). Reading Recovery, an intervention program for readers and writers who are struggling, is widely respected as the most successful program to accelerate the reading and writing development of first-grade students (Cox & Hopkins, 2006). Reading Recovery is unique in that it requires teachers to design a curriculum for each individual child aligned with her/his current strengths and needs, guided by their observations, understanding of Clay’s theory of literacy acquisition, and their own experiences with how children come to be literate (Jones, 2000). According to Jones (2000), this individualized type of instruction has to take on a reflective way of teaching.

In this chapter I focus on three strands of research and theory in order to understand the nature of reflection and how it informs teaching practices related to reading instruction. Currently there are debates about the definition and characteristics of reflection suggesting a need for a shared, common language. To address this, I examine the historical underpinnings of reflection and provide a multidimensional definition for understanding and examining reflection. Second, I examine research conducted on the reflective practices of literacy teachers to highlight significant effects of reflection on
teaching practices and student success. Last, I focus on theoretical and instructional guidelines of Reading Recovery, as an ideal environment to observe and examine the nature of teachers’ reflections and how those reflections inform their teaching practices.

**Historical Underpinnings of Reflection in Education**

Over the past 30 years the term *reflection* has increasingly appeared in the literature on teacher development and education. However, there remains a lack of clarity with regard to the definition (Fendler, 2003; Hatton & Smith, 1995; Laboskey, 1994; Lee, 2005; Raines & Shadiow, 1995; Roskos, Vukelich, & Risko, 2001; Scanlan & Chernomas, 1997; Zeichner & Liston, 1996). Hatton and Smith (1995) suggest reflection has been ill-defined and frequently applied as an umbrella term to explain and research a wide range of contexts and issues in education. Likewise, Zeichner and Liston (1996) contend nebulous definitions of reflection make comparisons among studies difficult and compromises program application and integrity. In a time of educational uncertainty and direction, the importance of a clear understanding of the historical underpinnings of the construct of reflection is vital to building a consensus on what reflection is and how it facilitates teaching and learning; ultimately leading to explorations of how to foster reflectivity among future and current educators in the 21st century.

**The Roots of Reflection**

*Reflection Surfaces: 1930’s*

The early 20th century educational philosopher, John Dewey, made many contributions to the way we think about education. He was one of the first theorists to view teachers as “reflective practitioners” who take an active role in curriculum development and educational reform (Zeichner & Liston, 1996). Drawing on teachings
from Plato and Aristotle, Dewey is credited for formally introducing the concept of reflection in education (Hatton & Smith, 1995). According to Dewey (1933), teachers begin the process of reflection when they experience a difficult or troublesome event. Prompted by a sense of uncertainty, or unease, teachers then reflect upon, or think about, their experiences and prior knowledge to inform future practice. Dewey defines reflection as a particular mode of thought; as an “active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the future conclusions to which it lends” (p. 70). Even in these early days of development, the construct of reflectivity carried with it the importance of purposeful thinking or volition by the reflector and the use of interacting with experiential knowledge to create plans and changes in one’s action. These characteristics of reflection ground future definitions and work conducted even today.

**Reflection Submerges: 1940’s-Early 1980’s**

Like Vygotsky, whose work did not rise to popularity until years after his death, there was a 40 year gap in the literature between the entry of reflectivity and serious educational discussions about it. Because research is situated in problems facing society at the time and guided by the goals they hope to achieve (Rosa & Montero, 1990), I propose that the focus on concerns for the educational quality of growing American schools and competition internationally influenced teaching and learning during this time and led to the development of the subsequent era of accountability. During the early part of this period educational research and practice was strongly influenced by behaviorism (Alexander & Fox, 2004). Reflectivity did not hold prominent places of discussion in the field where postwar schools were booming and a promise for an elite education for all
children was voiced (Pipho, 2000). It should be understood that reflection was still viewed as important during this time, there was just little research published which examined reflection (Van Manen, 1977; Habermas, 1973).

The current teaching workforce has witnessed school reform agendas appear and reappear every decade and has grown both skeptical and weary of a “rationale-linear, empirically driven perspective that (sic) has dominated the educational landscape for almost a century” (Liberman & Miller, 2000, p. 49). In a historical overview of standards-based assessments in teacher education, McIntyre (2007) chronicles the interest in standards for teachers dating back to 1870s. Two major reports in the early 1980s influenced the era of accountability. The report by the National Commission on Excellence in Education in 1983, a *Nation at Risk*, brought national attention to the field of teaching with criticisms prompting a call for standards-based education. In a subsequent 1986 Carnegie Forum on Education and the Economy’s Task Force on Teaching as a Profession’s report, *A Nation Prepared: Teachers for the 21st Century*, teachers reemerged as key to school reform efforts and student learning, resulting in the current National Board for Professional Teaching Standards (NBPTS). Among the five core propositions by the NBPTS, proposition four states that “teachers think systematically about their practice and learn from experience” and further requires that teachers “critically examine their practice on a regular basis to deepen knowledge, expand their repertoire of skills, and incorporate new findings into their practice” (National Board for Professional Teaching Standards, 2008). Standards set the stage for recommendations that required the teacher to learn and implement new knowledge created by research as well as “… knowledge that is created in the process of action and
reflection on practice” (Liberman & Miller, 2000, p. 49). One challenge for educators of the 21\textsuperscript{st} century is how to do both.

\textit{Reflection Reemerges: Mid-1980s}

As the field of teacher development and psychology of learning advanced, the concept of reflectivity developed to include thinking in process. Teaching was viewed as more than a series of recitation activities and the advent of constructivist theory (Rogoff & Lave, 1984; Vygotsky, 1986) helped educators picture the complexities that exist as knowledge is constructed through mediated social interactions. The teacher was viewed as key player in scaffolding learning and taking advantage of teachable moments (Bruner, 1983). Emphasis on teachable moments and teaching practices guided by social interactions in the classroom gave rise to the importance of understanding teachers’ decision-making processes while they were teaching. Teaching and learning as a process along a continuum required that reflectivity align with the new ways of knowledge construction (Liberman & Miller, 2000) and include the process of learning—both during and after.

Donald Schön (1987) drew on Dewey’s definition of reflection by asserting there are two types of reflection: reflection-in-action and reflection-on-action. Reflection-in-action guides the teachers’ in-the-moment decisions in the classroom. Unlike Dewey, Schön focuses on the importance of reflection “during” action to inform immediate decisions that must be made while teaching (i.e., the best way to answer a child’s question). Like Dewey, reflection-on-action requires a teacher to reflect on her/his past teaching and plan new lessons according to those reflections. As teachers reflect during and on their teaching practices, the process becomes cyclical, as it spirals and influences
future practices (Schön, 1987; Zeichner & Liston, 1996). Reflection-on-action is viewed as a tool for influencing future practice. Schön was able to highlight some of the intricate decisions teachers have to make on the spot, an important aspect of teacher development to understand in an era where the importance of accountability was growing.

**Reflection Evolves: 1990s**

As we are well versed in the importance of teacher accountability and excellence today, the 1990’s gave rise to an exciting theory in education: constructivism. While constructivism as a theory emerged before the 90’s, it wasn’t until then that we witnessed a significant rise in the number of constructivist classrooms and teaching practices discussed across the nation (Phillips, 1995). More value was being placed on the teacher’s ability to make decisions based on her/his observations of students, their interests and individual needs (Fosnot, 1996; Weiner, 2000). Constructivist teaching allowed teachers to reflect on their teaching practices and meet the needs of individual students (Clegg, 2000; Fendler, 2003). One of the most unique aspects of reflection is the way it leads to significant personal transformation (Mezirow, 1997). Mezirow contends teachers make meaning of their practice through reflection which is their personal interpretation of reality, rather than a prescribed view handed down from another (Merriam & Caffarella, 1999). He contends this type of transformation is more than simply adding to what we already understand about the world, but that transformative learning “shapes” people and changes the way they see themselves and the world (Mezirow, 1997).

Teachers’ reflection, as it guides their own decision-making, is an important component of constructivism and researchers were interested in what those reflections
were. As theories of learning were explored further and research contributed to greater understanding of reflectivity, we began to see the need for establishing theories and models to help explain the relations and complexities of thinking during teaching that were being discovered. Likewise, during this time, school reform efforts also resulted in research that attempted to describe and categorize the types of teacher reflections observed related to program expectations and objectives (Griffiths & Tann, 1992; Hatton & Smith, 1995; Valli, 1997; Van Manen, 1995; Zeichner & Liston, 1996). Defining features and characteristics of reflection into discrete levels has an important place in the research arena; however, the efforts of scholars to distinguish different types of reflection has diluted the definition of reflection resulting in the widespread use of the term (Fendler, 2003; Hatton & Smith, 1995; Laboskey, 1994; Lee, 2005; Raines & Shadiow, 1995; Roskos, Vukelich, & Risko, 2001; Scanlan & Chernomas, 1997; Zeichner & Liston, 1996). Because of this, often times educators are not examining the same construct when conducting research on teacher reflection (Zeichner & Liston, 1996).

Concurrently, researchers began to explore the specificity of reflection through an examination of hierarchical levels (Valli, 1997; Van Manen, 1995) and models (Griffiths & Tann, 1992; Hatton & Smith, 1995; Zeichner & Liston, 1996). Van Manen (1995) presented three hierarchical levels of reflection, each one higher than the previous and superseding it: technical, practical (also called interpretive), and critical reflection (Griffiths & Tann, 1992). Technical reflection is the act of defining goals and creating a plan(s) for achieving those goals. During practical reflection, a teacher questions, challenges, and considers her/his set goals and action plan. Van Manen’s critical reflection calls for moral and ethical consideration of teaching practices. His hierarchy
implies that there is a degree of sophistication from one type of reflection to another; therefore espousing there are better kinds of reflection than others.

Similarly, Griffiths and Tann (1992) recognize different levels and purposes of reflection, additionally noting all are necessary and important to the development of a teacher. Based upon their research with preservice teachers and reflection, they developed five levels of reflection: (1) Rapid reflection; (2) Repair; (3) Review; (4) Research; and (5) Retheorizing. Rapid reflection, as previously mentioned, is similar to Schön’s reflection-in-action. It is immediate and automatic, almost second nature. Repair, while still considered to occur during action is thoughtful. It is not immediate, but does occur during action. A third, less formal, reflection-on-action, is Review. This occurs at a particular time following an action, but tends to be a generic or surface “review” of the action. The final two levels of reflection are based on “long term” reflection. Instead of immediacy in reflection, these levels of reflection illuminate a change over time. The fourth level of reflection, Research, is more systematic reflection-on-action conducted over a period of time. This reflection may be exemplified by a teacher who spends a week reflecting on the different teaching strategies used during a lesson. Lastly, Retheorizing is long-term reflection-on-action influenced by others. This particular level of reflection most closely resembles critical reflection, described in more detail later, which calls for a collaborative reflective process as opposed to individual reflection.

More concerned with a teacher’s reflective thinking, Zeichner and Liston (1996) identified five traditions of reflective practice that have guided reform efforts. The five traditions are diverse and identify a specific aspect of the content of the individuals’ thinking. They are: academic, social efficiency, developmentalist, social
reconstructionist, and generic (for a full description of traditions see Zeichner and Liston, 1996). Reflections associated with subject matter and promoting student understanding of the subject matter is considered an academic tradition, whereas, social efficiency stresses purposeful thinking about research-based approaches to teaching and informing teaching practices. Focusing more on the child than subject matter or research based approaches, developmentalist tradition highlights reflections centered on student backgrounds, cultures, interests, experiences, etc. Most recently the emergence of another tradition, social reconstructionist, focuses on reflection to promote social justice, equality, and being a part of a just society. The generic tradition stresses a surface level of reflection, thinking about an action without examining the “quality” or “substance” of that thinking (p. 52). Importantly, Zeichner and Liston stress that these traditions do not represent a teacher’s approach to reflection; but, a distillation of teacher’s reflective practice across historical developments. Thus, highlighting it is through the act of reflection, not the “level” or “type” that teachers become more capable, more skilled, and in general, better at their craft (Coombs, 2003; Friedland & George, 2006; Roskos, Vukelich, & Risko, 2001; Zeichner & Liston, 1996).

Reflection Refined: Early 2000s

Uniquely situated in a time when constructivism was evolving into a more sophisticated theoretical framework, leading to social justice and equality (Palinscar, 1998), researchers and scholars alike began to examine teachers’ reflections as they related to beliefs, values, biases, and prior experiences. Until the early-2000’s, reflection was largely defined within the parameters of when it occurred and labeled as a specific type of reflection according to what a teacher reflected about, no doubt highlighting the
pragmatism of the complex and unique thinking that goes into teaching. And while theorists differ in their beliefs regarding when a reflection does or should take place and the type which frames it, they are all grounded by the context in which reflection occurs.

Because reflections are driven by our prior experiences, values and beliefs, it should be understood that what happens inside a classroom is greatly influenced by what happens outside. When teachers reflect upon their teaching they situate the reflection in a variety of perspectives (i.e., pedagogy, practice, theory, beliefs, values, attitudes, etc.) (Au, 1998; Burden, 1990; Darling-Hammond & Sclan, 1996; Delpit, 1995; Gee, 2001; Heath, 2000; Howard, 2003; Kozol, 1991; Webb, 2001). Without some concerted attention given to those assumptions, influences, and the other social conditions of schooling influencing their reflections, it is possible teachers may frame their reflections in beliefs or prevailing norms inhibiting the refinement of their teaching (Au, 1998; 1995; Lortie, 2002; Valli, 1997; Webb, 2001; Zeichner & Liston, 1996).

Contrastingly, a push for critical reflection and call for teachers to reflect in ways that lead to justice, equality and social activism occurred at the same time No Child Left Behind (NCLB) was unveiled. NCLB, with its emphasis on standardized instruction focuses on student performance outcomes (i.e., standardized test scores) to guide instruction rather than teacher reflection to inform practice (Cochran-Smith, 2005). The push toward teacher accountability and high-stakes testing has placed a high value on quantitative measures of success. Reflection is not “measurable” due to its inherently intrinsic, personal nature. This high-stakes testing and quantitative accountability era may create teachers who are reflective conservatives (Lortie, 2002), teachers who fall back on “by the book” practices and lack the will, or possibly the self-efficacy, to reflect on their
own personal theories of practice to inform their teaching (Cochran-Smith, 2005; Davis, 2005; Zeichner & Liston, 1996).

Additionally, requirements of NCLB have led to varying school reform efforts to meet the needs of students and teachers prescribed in the law. Though research on school reform efforts is relatively new, opportunities to reflect within one reform effort led to the increased self-efficacy of teachers and increased student achievement. In their attempts to identify factors of reform efforts which increased student achievement in reading and writing, Taylor et al. (2005) found reflection played an important role. Thirteen schools, two teachers per grade (n=22), and nine children per classroom (n=733) were randomly selected. Students’ test scores were analyzed at the beginning and end of the school year for literacy growth. The school reform effort focused on literacy and school improvement and highlighted professional development. The entire teaching staff met once a month for an hour to discuss shared leadership, the reading program and parent involvement. Staff also met three times a month for teachers’ needs and provided a time to reflect on reading instruction and professional development in the teaching of reading. Researchers found 65% of variance between schools in reading achievement was accounted for by the reform effort. Directly impacting the schools with higher reading scores were specific aspects of the school reform model: (1) Meetings with small groups; (2) Reflection on instruction and student work; (3) Effective leadership team; (4) Prolonged engagement with topic; and (5) Monthly large-group meetings (Taylor et al., 2005). Teachers rated teacher reflection as the second most influential practice improving their teaching and their students’ test scores; professional development was found to be the most influential.
Interestingly, one could argue it was during these professional development meetings that a space for reflection to occur was provided and the act of reflection was validated. Thus, the reflective practices occurring during these professional development meetings was a key factor contributing to the success of the school reform model and to raising the reading and writing scores of the students. One teacher, when discussing the value of reflection and change said, “I now see more clearly how to help kids…how to meet their individual needs” (p. 63). Honing in on children’s individual needs provides teachers with strategies to help each student succeed in school. Reflection allowed teachers to individualize their instruction to students (a major tenet of NCLB).

Sharing reflections collaboratively with peers and colleagues, like the teachers in the aforementioned study (Taylor et al., 2005), may help to uncover and challenge the assumptions teachers make in their teaching (Valli, 1997; Zumwalt & Craig, 2005). It is necessary to reflect with peers to bring to the surface personal biases, as well as working toward promoting equity and social justice in schools (Howard, 2003; Webb, 2001). Because collaborative reflection is a relatively new way of reflecting, there is a dearth of research and literature focused on whether and how much reflection should be shared and kept private (Osterman & Kottkamp, 1993).

Though critical reflection, as it relates to collaborative reflection, is a relatively new term (Cochran-Smith, 2005; Howard, 2003), sharing reflections, feelings, beliefs and values with others has been recognized as an important practice in education to promote teacher development and more equitable opportunities for years (Adler, 1991; Burden, 1990; Darling-Hammond, 2006; Delpit, 1995; Gore & Zeichner, 1991; Hole & McEntee, 1999; Lortie, 1975). Burden (1990) in his review of research on teacher development
highlights the influence of collaborative opportunities for teachers to reflect and conduct research together to support teacher development. Teacher socialization evolves in large part due to the influence of colleagues because their connections are grounded by similar working conditions and common circumstances the other faces (Gore & Zeichner, 1991; Rogers & Mosley, 2006).

Traditionally, teaching has been viewed as an individualistic and hence isolated occupation (Lortie, 1975). Subsequently, school systems do not have in place many opportunities for teacher socialization and professional exchange in ongoing and meaningful ways. Teachers often report that they need more time with other teachers to discuss teaching and learning in their classrooms and to share reflections (Taylor et al., 2005). Nieto (2005) argues for teacher opportunities to form a community of reflective practitioners where they can confront their own identities and refine their thoughts and practices to more appropriately and culturally responsively meet the needs of students in their classrooms. New research in a professional development strategy grounded in the collaborative sharing of reflections, Critical Friends Groups (CFGs), offers promise for propelling reflectivity to new levels. CFGs were established by the National School Reform Faculty program (NSRF) 1995 to help teachers come together as a democratic group that is practitioner-driven, collegial, and creates a highly reflective learning community to meet the demands of embracing mandated curriculums and tailoring them to the diverse needs of each student in the classroom (Bambino, 2002; Dunne & Honts, 1998).

CFGs are generally made up of teachers, administrators, and university liaisons. The purpose of the group is four-fold: (1) to meet monthly and discuss student goals set
by teachers; (2) to help each other think about their own teaching practices and how they relate to meeting their goals; (3) to examine the curriculum and student work; and (4) to identify larger contexts (i.e. school, community, policy) which impact student achievement (Bambino, 2002; Dunne & Honts, 1998).

Drawn from his research on CFGs, Bambino (2002) describes three examples of how reflective learning communities are shaping and changing the climate and culture of schools. CFGs provide an environment for teachers to give and receive feedback on lessons. Secondly, CFGs provide safe arenas for teachers to reflect and collaborate. CFGs provide a new way for educational stakeholders to evaluate professional development. In direct opposition to the often quick and limited professional development teachers are receiving, CFGs provide a community for educators to reflect upon their teaching practices with other professionals and ameliorate their practice. Though critical reflection, understood as reflection leading to unveiled beliefs, values, and assumptions leading to social activism, is a relatively new way of thinking about reflection, CFGs and some reform efforts are providing professional development opportunities for teachers where they can develop as reflective practitioners and come together as a community to improve the educational climate for all students.

*Adopting a Definition of Reflection in the 21st Century: Present Day*

There are many different definitions and interpretations of reflection and how it can be (and has been) applied to teacher development. Current research on reflection focuses heavily on one of the three dimensions of reflection described previously: time, type or context (Calderhead, 1987; Dewey, 1933; Edwards & Hensien, 1999; Hatton & Smith, 1995; Schön, 1987; Van Manen, 1995; Valli, 1997; Zeichner & Liston, 1996).
Time refers to when the reflection occurs: prior to an action (Van Manen, 1995), during an action (i.e., Schön’s reflection-in-action), or following an action (i.e. Schön’s reflection-on-action). Type corresponds to the various content of the reflection such as technical, deliberative, or critical reflection (Griffiths & Tann, 1992; Hatton & Smith, 1995; Van Manen, 1995; Valli, 1997). Context highlights the conditional background or situation in which reflection occurs or who, if anyone, reflection takes place with (i.e., individually, within a small group of teachers). In defining reflection in the 21st century, I draw heavily from both Dewey and Schön, as a majority of the definitions of reflection are inextricably bound to these two theorists’ contributions to our understanding of reflection. Each of the three dimensions, time, type, and context are embedded within the definition. Importantly, I define reflection to be applied to education, not globally. While it could be applied to other arenas (i.e. nursing, business), I have developed this definition with teachers and teaching in mind.

I believe in the need for a contemporary framework situated in the way in which we understand teaching and learning today. Hence, reflection is defined as purposeful thinking that can be prompted by a sense of uncertainty, unease, surprise, boredom or success. Reflection is the focused consideration of any belief or practice due to past experiences and (or) influenced by prior knowledge that can happen before, during or after an action (i.e., time), and is a cyclical process which refines and shapes the thinking and practice of teachers. The act of reflectivity is a holistic one, drawing from many different sources of our understanding, values, beliefs and experiences (i.e., type). Concerted attention should be paid to the conditional background or situation in which reflection occurs and who (if anyone) reflection takes place with (i.e., context).
As we forge into the future with this shared goal, we must remain grounded in the original conception of reflection. While much has changed about our understanding of reflection since the 1930’s (see Figure 3), Dewey’s premise remains largely the same. Reflection “emancipates us from merely impulsive and routine activity…and enables us to direct our actions with foresight and to plan according to ends in view of purposes of which we are aware. It enables us to know what we are about when we act” (Dewey, 1933, p. 17).

Heeding Dewey’s charge for the emancipation of “impulsive” and “routine” teaching, it is through the use of a multidimensional definition of reflection that researchers can more fully examine the nature of teachers’ reflections and how these reflections are informing their teaching practices. This research is significant in its contribution to the field during a time when the phrase “teacher accountability” appears with greater frequency in newspapers, magazines, educational journals, and national laws and teachers feel greater pressure to conform and comply with adopted reading programs and standards. Furthermore, one specific content area is deemed critical in creating a “competitive and productive” citizen: every child must learn to read. The most successful
teachers of reading understand and engage in reflection to better attend to individual learning styles of students, make teaching decision based on strengths, needs, and interests of the child, and examine their own teaching practices individually and with colleagues. Research associated with these tenets is discussed below.

**Figure 3. Historical Lineage of Reflection.**

*Reflection: A Hallmark of Practice*

To be an effective teacher of literacy, Roskos, Vukelich, and Risko (2001) contend reflection is a vital feature of practice. In their comparative analysis of fifty-four studies (18 literacy and 36 general education) related to reflective practice, they found that engaging future teachers of literacy in varying opportunities (i.e., journal writing, shared reflection, etc.) to critique their own reasoning makes explicit to them the power of their own thinking and its value in directing instructional decisions and problem solving. Mazzoni and Gambrell (2003), in their analysis of “best practices” in teaching
literacy, contend ongoing reflection provided the cornerstone of best practice, where the most effective literacy teachers were constantly questioning their teaching, reflecting on their practice, trying out new theories of practice and reflecting again to better inform their instruction.

*Reflective Practice of Teachers as Visionaries*

Literacy teachers carry with them the responsibility to meet nationally mandated standards while simultaneously reflecting on their own practice to meet the individual strengths and needs of their students. The most successful teachers of literacy have been found to navigate this responsibility by “visioning” (Duffy, 2002, p. 334). “When teachers have a vision, they assume control over instructional decision making in order to achieve the mission” (p. 334). Four characteristics of teacher visionaries are: (1) their ability to make decisions based on their observations of children and related to their interests and needs; (2) their strong sense of self as an independent, reflective thinker; (3) their identity as autonomous, resisting the temptation to be followers; and (4) their passion for teaching which overrides frustrations. Teacher reflection acts as a cornerstone of these characteristics of an outstanding teacher of literacy.

*Role of Reflection in Decision-making*

In her extensive research on reading teachers, Clay (1991) found their reflections directly impacted the way they taught young children how to read and the teaching strategies they employed. The importance of the teacher being a decision-maker underlines the role of reflection in Flippo’s (2001) research on expert literacy teachers. He found that effective teachers of literacy make informed decisions about instructional practices that are most appropriate for students. This informed decision-making was a
result of reflection on the teachers’ practice and observations of students. Likewise, 
Duffy and colleagues (Duffy, 1988; 2002; Duffy & Anderson, 1984; Duffy & Roehler, 
1981, 1982; Duffy, Roehler, Sivan, Rackliffe, Book, Meloth, Vavrus, Wesselman, 
Putnam, & Bassiri, 1987) research-based contributions to the way we understand literacy 
teachers decision-making have been grounded in reflection. As teachers are given the 
onus to reflect on their own beliefs, experiences, practices, and values to make decisions 
that best match the interests, strengths, and needs of children they are more successful in 
learning to read and write in the classroom.

*Attending to Individual Learning Styles*

Without reflection, attention to individual learning styles may be overlooked (Au, 
understand only their cultural perspective regarding the development and acquisition of 
reading skills and fail to recognize other cultural traditions that may give impetus and 
form reading development. Au (1998), in her research on the literacy learning of 
Hawaiian students highlighted the disparities between the ethnicity of students and 
teachers (fewer than 10% of teachers were Hawaiian). She also highlighted the lack of 
understanding between the literacy learning cultures of the students compared to the 
teachers. Au found teachers who reflected on their own literacy cultures (individually and 
with peers), compared to that of their students, and were able to adapt their teaching to 
meet individual learning styles of students more successfully. Unique to Reading 
Recovery is that each teacher individually designs and delivers lessons based on careful 
observation and reflection of the child’s individual strengths and needs in reading and 
writing.
"Examining Personal Practice and Beliefs through Collaborative Reflection"

 Likewise, Raphael et al. (2001) contend we must have opportunities to examine our own literacy practices within a context that links our experiences to our role as a teacher of reading. The researchers worked together to form the teachers learning collaborative (TLC) in which they came together and reflected on their own experiences, beliefs, and challenges related to teaching and being a teacher of literacy. They discuss how on the most basic level, reflection plays a role in how teachers select children’s literature and classroom libraries. How they participate in teaching reading (i.e. specific contexts, histories, discourses, and conversations about literature) is further influenced by their reflection on their own reading experiences, understanding of reading development, and observations of children (Au, 2001; Clay, 2001; Enciso, 2001; Raphael et al., 2001). Furthermore, after twenty years conducting research on reflection, Osterman and Kottkamp (1993, 2004) contend reflection develops a greater level of self-awareness on teacher’s teaching practices that creates opportunities for professional growth and development. They found that in order for teachers to understand their own practices and the decisions underlying those practices, they must develop a conscious awareness of their own actions, effects of those actions, and ideas or theories that shape those. This reflective practice, as a means of professional growth, was nurtured by the support of colleagues who could listen to and share their own similar experiences. Similarly, Rogers, Marshall, and Tyson (2006) in their case study research on the “dialogic narratives” of ten preservice teachers of literacy, found reflection through dialogue aided in teachers’ understanding their professional identity in relation to their personal experiences with literacy and teaching.
Literacy teachers, as visionaries, must understand the importance of and engage in reflection as a hallmark of their practice to attend to individual learning styles of students, make teaching decisions related to strengths and needs of the child, and examine their own teaching practices (Clay, 1991; Rogers, Marshall, & Tyson, 2006). One group of literacy educators in particular has had great success teaching children to read while using reflection as a cornerstone of their practice. In the following section I highlight the theoretical and structural guidelines of Reading Recovery, an intervention program foundational built on the premise that teachers of literacy must be reflective to teach young children to read and write successfully.

*Reading Recovery: Ripe with Reflection*

Few literacy programs have had as much success teaching young children to read as Reading Recovery; a progressive intervention program successful in teaching young children to read (Center, Wheldall, Freeman, Outhred, McNaught, 1995; Iversen & Turner, 1993; Pinnell, 1989; Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1993; Quay, Steele, Johnson, Hortman, 2001; Schwartz, 2005). The success of Reading Recovery teachers to bring the lowest performing readers and writers to average levels of achievement in 12-15 weeks has been cited repeatedly in research (Clay & Cazden, 1990; Cox & Hopkins, 2006, Gomez-Bellenge, Rodgers, & Wang, 2004; Lyons, 1994; Lyons & Beaver, 1995; Pinnell, 1997; Schmitt, Askew, Fountas, Lyons, & Pinnell, 2005). In fact, researchers claim there is “more research evidence supporting Reading Recovery as a means to accelerate the development of early reading than any other instructional intervention” (Cox & Hopkins, p. 257).
The What Works Clearinghouse (WWC), established in 2002 as a branch of the Department of Education, conducted an independent review of five experimental research studies of Reading Recovery confirming the program’s effectiveness based on scientific data. They found effects of Reading Recovery to be significantly positive on general reading achievement and alphabetics (i.e., the understanding of the use of letters to represent words and meaning). Furthermore, positive effects were found related to the successful teaching of fluency and comprehension. Perhaps most significantly, the WWC found no other early intervention programs to parallel Reading Recovery’s overall success (IES, 2007). To be identified as an effective program by the WWC is noteworthy. The initiative of the WWC is to provide research-based pragmatic guides for educational stakeholders, assess the rigor of research findings to highlight the effectiveness of interventions, and develop and implement standards for reviewing and synthesizing research.

In addition to the WWC’s report, hundreds of researchers have examined and evaluated various aspects of Reading Recovery. D’Agostino and Murphy (2004), in their meta-analysis of 36 studies examining the overall program effects of Reading Recovery in U.S. schools, found students in Reading Recovery improved significantly on all measures of reading development (i.e., comprehension, fluency), including standardized tests. Shanahan and Barr (1995) conducted a meta-analysis of all published evaluations of Reading Recovery and found children made significant gains in reading compared to other reading interventions. Leading to a revised Reading Recovery lesson plan, Iverson and Tunmer (1993) compared children receiving regular Reading Recovery lessons to children receiving a modified Reading Recovery lesson with a daily focus of
phonological awareness. Children receiving the modified lesson progressed through the intervention more quickly than those in the control group.

Additional studies have explored such issues as sustained progress of Reading Recovery students (Pinnell 1989; Pinnell et al., 1993; Smith- Burke, Jaggar, & Ashdown, 1994); cost-effectiveness compared to remedial reading programs, retention, and special education (Dyer, 1992); increased self-esteem of Reading Recovery students (Cohen, McDonald, Osborne, 1989; Rumbaugh & Brown, 2000); closing the literacy achievement gap (Rodgers, Wang, Gómez-Ballengé, 2005); and English language learners (Ashdown & Simic, 2000; Neal & Kelly, 1999). These studies provide substantial evidence of Reading Recovery’s effectiveness and influence (Schmitt et al., 2005). The overarching success and effectiveness of Reading Recovery is due to Clay (2007) and her colleagues purposeful outlining of a theoretical framework and specific program guidelines which must be understood and accepted by teachers to successfully work with children enrolled in Reading Recovery. The theoretical framework and structural guidelines of Reading Recovery are described below.

_Teoretical Framework of Reading Recovery_

Marie Clay’s research on the literacy development of young children over the past 20 years has made important contributions to our understanding of literacy development (Clark, 1992). In the 1960’s and 1970’s text books tended to focus on the initial teaching of reading in the first few years of formal schooling. When Clay began conducting research during this time, she observed the reading strategies of children in their first two years of formal schooling. Her doctoral thesis, completed in the late 60’s highlighted the importance of acknowledging the individualized paths each child takes to learning to read
and acknowledging children as active learners in their first formalized attempts with print (Clark). In 1972, when most researchers were still examining reading as a visual task to be acquired by didactic teaching, Clay was examining and coming to understand this as a mixing of complex behaviors. Over the following 10 years, Clay conducted longitudinal research on children entering their first year of formal schooling in New Zealand. Her findings revealed children’s progress of becoming literate differs from child to child depending on methods adopted to teach them. Successful children would develop strategies that reinforced their success, while struggling children developed counterproductive strategies that became engrained in their development. The need to identify less successful children and replace these counterproductive strategies laid the foundation for the Reading Recovery program (Clark, 1992). In the 1980’s Clay began highlighting the reciprocal relationship between reading and writing, noting how most students who struggle in reading delay their progress in writing as well. Thus, reading and writing became integral, reciprocal tasks to be attended to during one-on-one lessons with children who were identified as struggling.

Cox and Hopkins (2006) highlighted seven theoretical principles of Reading Recovery gleaned from Marie Clay’s research on young children and guided by her background in developmental psychology. In short, reading should be understood as a complex, problem-solving practice where children, coming to the act with varying experiences and understanding, construct their own meaning. Reading and writing are reciprocal and interrelated processes, where learning to read involves a process of reading and writing continuous text. From her roots in cognitive psychology, Clay (2001) contends Reading Recovery teachers must have experience and knowledge related to the
process of literacy development, monitoring, and appropriate instruction. In addition, grounded in her developmental psychology roots, Clay asserts Reading Recovery teachers must also have an understanding of the importance of reflection on one’s practice (Clay, 2001; Cox & Hopkins, 2006; Fountas & Pinnell, 2006; Jones, 2000).

The information which helps direct Reading Recovery teachers through their actions and decision-making comes from several sources guided by many considerations derived from Marie Clay’s theory of literacy acquisition (Clay, 1998; 2001; 2005; Jones, 2000). Clay contends children’s development as literate beings is a complex, individual process. Each child takes a different path to becoming literate and developing their own self-extending system which highlights an “inner control” of the reading and writing task. As they develop, children exemplify different strategies used and ways they attended to different aspects of literacy. Some specific areas of processing observed in a child’s literacy acquisition are reading fluently for meaning, recognizing and responding to letters quickly, understanding various text structures, hearing and recording speech sounds in sequence in writing (Clay, 1998; 2001; 2005; Fountas & Pinnell, 2006; Jones, 2000). Additionally the "process by which the child can, on the run, extract a sequence of cues from printed texts and relate these, one to another, so that he can understand the precise message of the text (Clay, 1991, p. 13)" highlights her theory of reading acquisition. To be successful in this process, children must have control of oral language, developed perceptual skills, the physiological maturity and experiences that allow the child to coordinate what s/he hears in language and sees in print, and enough hand-eye coordination so s/he can learn the controlled, directional patterns required for reading (Clay, 1979; Wasik & Slavin, 1993).
In addition to the seven theoretical principles undergirding Reading Recovery, Cox and Hopkins outline four theory-based instructional assumptions that guide the development and implementation of the program. First, teachers must understand how systematic observations of students inform their teaching practices. Next, during observations teachers must purposefully observe the different skills and strategies the child is using correctly, incorrectly, or failing to use at all. This systematic observation results in reflection to aid in the decision-making process; addressing student’s specific strengths and accelerating their learning. Importantly, these assumptions do not contend that a specific set of procedures is the right way for every child; rather, they assume it is the “teacher’s knowledge, reflection, guidance, systematic observation, and willingness to consider and reevaluate decisions based on continuing observations that effectively assists each child’s march to literacy” (p. 262).

**Structural Framework of Reading Recovery**

Reading Recovery teachers supplement classroom lessons with one-on-one tutoring sessions during the school day. Specially trained Reading Recovery teachers work with the lowest twenty-percent of first-grade readers and writers within their school, teaching them how to improve their own reading and writing skills. Reading Recovery is carefully designed to accelerate the reading and writing skills of children who are at-risk for continuing low achievement in literacy. The intervention program typically takes place daily for thirty minutes over 12-20 weeks (Institute of Education Sciences, 2007). Each lesson includes reading texts and writing. The same steps are to be followed in purposeful order daily: (1) reading of two or more familiar books; (2) rereading yesterday’s new book and taking a running record; (3) letter identification; (4)
breaking words into parts; (5) writing a story; (6) hearing and recording sounds; (7)
reconstructing the cut-up story; (8) listening to the new book introduction; (9) attempting
to read a new book (Clay, 2005). Though predictability and consistency are established
through this structure, lessons must be designed to meet the individual strengths and
needs of the child (Clay, 1991, 2005). Teachers accomplish this through their systematic
observation of children, and then plan accordingly.

Reading Recovery is an apprenticeship model. Reading Recovery teachers are
specially trained for a year while working with students. The year-long training helps
teachers to develop a “self-extending system” through which they can increase their
understanding of reading and writing development (Smith-Burke & Jaggar, 1994). They
describe this training as a “process of learning to identify, prioritize, and solve problems
or challenges through reflection, redesign, and innovative attempts” (p. 63). Participants’
training purposefully teaches educators how to reflect at two different times, during a
lesson and on their practice. Clay (1998) contends this training period is a “year-long
period of change.”

The challenges in training teachers lie in uncovering hidden guidelines
made by teachers that are antagonistic to the progress of hard-to-teach
children. We need them to become more flexible and tentative, to observe
constantly and alter their guidelines in line with what they record as the
children work. They need to challenge their own thinking continually.
They learn to use the rationales for decision making which make the
teaching and the organization of the program run more effectively.

Change, Clay believes, is a unit of learning itself during that first year of training. Geekie
(1992), in his research on Reading Recovery teachers in training, reported a shift from
widespread skepticism to unwavering commitment among Reading Recovery teachers
and among schools. After their successful completion of training, Reading Recovery
teachers continue to meet collaboratively to discuss and reflect on their work with students by attending on-going professional development. Similar to the recently evolving Critical Friends Groups (CFG) and the Teachers’ Learning Community (TLC), the strong professional development component of Reading Recovery allows for colleagues to come together and discuss, reflect on, and examine their own literacy practices and their children’s strengths and needs. In addition to the professional development communities like CFGs and the TLC, Reading Recovery also provides peer observations where colleagues observe each other teaching a Reading Recovery lesson to a student “behind the glass.” Teachers observing the lesson reflect together about their observations of the teacher and child. After the lesson the group comes together to discuss their observations and reflections. These professional development opportunities for teachers to reflect on their own literacy practices have been key in its impact on raising literacy skills of students (Clay, 1998; Cox & Hopkins, 2006).

Additionally, Clay (2005) contends success rests in a teachers’ ability to design a “superbly sequenced series of lessons determined by the particular child’s competencies, and make highly skilled decisions moment by moment during the lesson” (p. 23). The key to such success of Reading Recovery is not happenstance. Reading Recovery teachers have a “high level of expertise and knowledge regarding the literacy development process, its monitoring, and appropriate instruction, as well as an understanding of the importance of reflection on one’s practice” (Cox & Hopkins, 2006, p. 261). Clay (1991) believed Reading Recovery could only be successful when teachers were keen observers of students engaged in the act of reading and writing and reflected upon their observations to influence their instructional practice to meet the diverse
instructional needs of each student. Thus, a teacher’s instructional decisions are based upon her knowledge related to literacy development and reflection on the different learning styles and strategies of children (Cox and Hopkins, 2006).

*Reflective Practice Built Into Reading Recovery*

Clay was instrumental in her research on emergent literacy, Reading Recovery, and stressing the importance of teacher reflection to guide teachers’ practice. A foundational premise of Reading Recovery is that the decision-making responsibility of the teacher is a constant negotiation of how to adapt Clay’s theory of literacy and their training experiences to the individual strengths and weaknesses of each child (Clay, 1991; Clay, 2005; Jones, 2000). “Each component of the lesson is designed to reflect increasing difficulty and challenges and to simultaneously meet the moment-to-moment needs of the learner based on the child’s response to the lesson” (Cox & Hopkins, 2006, p. 256). Thus the Reading Recovery teachers’ ability to reflect, both during and after the lesson, on the child’s reading and writing behaviors, is paramount to the success of the lesson (Clay, 1998; Cox & Hopkins, 2006). This decision-making process, also called a “reflective way of thinking” (Jones, 2000), is fostered by Reading Recovery through the teacher artifacts to be filled out during each lesson with a child, observations by teacher leaders, professional development opportunities, and meetings with colleagues. Teacher artifacts, and the reflective practices evidenced in each, are discussed in chapter three. Reading Recovery teachers are also required to reexamine (alone and with colleagues) their analysis of the child’s actions on a regular basis. This re-analysis involves reflection on one’s self as well as the child.

*Research on Reading Recovery Teachers’ Reflective Practices*
While Reading Recovery is one of the leading programs increasing literacy skills in young students today (Schwartz, 2005), there has been no research conducted that investigates the nature of Reading Recovery teachers’ reflections and how those reflections inform their teaching practices. Perhaps most closely related is Emily Rodgers (2004) extensive research on the scaffolding practices of Reading Recovery teachers. Her focus lies heavily in how effective literacy tutors deliver instruction in response to a student’s ever-changing literacy abilities. Importantly, examining the role of reflection in the process of this decision-making process might contribute more to our understanding of how scaffolding emerges in Reading Recovery teachers’ teaching practices. Rodgers describes scaffolding in terms of “the instructional decisions teachers must make on a moment-by-moment basis about the kind of help and level or amount of help to provide points of difficulty during reading” (p. 501). This research is significant in that it supports the notion that instructional decisions are being made moment-by-moment to meet the strengths and needs of each child in the form of scaffolding. Rodgers research highlights the nature of Reading Recovery teachers’ decisions, while my research highlights the nature of their reflections which informs these decisions. In my study, I examine the “behind the scenes” and “in the head” reflections which contribute to the decision-making of teachers. More specifically, I examined the nature of Reading Recovery teachers’ reflections and how these reflections informed their teaching practices.

Conclusion and Suggestions for Future Research on Reflection

Reading Recovery, with strong roots in reflectivity, and its overarching success in raising the literacy skills of young children may offer some insight into how reflection, understood multidimensionally, informs teachers’ practice when teaching young children
to read. Although researchers and educators worldwide tout the importance of teacher reflection, few studies, particularly in the field of literacy, have researched the nature of teachers’ reflections and how those reflections inform their teaching practices. No studies were located that focused specifically on the nature of reading teachers reflections and how those reflections inform their teaching practices.

Roskos, Vukelich and Risko (2001) also highlight the privileged analysis of influential factors of reflection, as opposed to individual variables. They believe research conducted on reflection, as it relates to literacy, tends to delineate reflection without building, analyzing, and interpreting an evidence base for reflection. Researching how teacher reflection, within its three dimensions, informs practice may help address these gaps and offer policy makers, curriculum developers, and teacher educators more detailed examples of reflection as it relates to teaching young children to read and write.

A major obstacle facing teacher development is how to ascend above of what Cochran-Smith (2005) termed the “outcomes trap” set by NCLB and reposition opportunities for reflection, both privately and collaboratively, as a dominant force in teacher development. As researchers, we must examine how reflection is informing teachers’ practice to combat the outcomes trap. Instead of simply examining what teachers are reflecting about, we must research how teachers’ reflections are informing their practice. Therefore, I examined the nature of Reading Recovery teachers’ reflections multidimensionally. Furthermore, I examined how the reflections of Reading Recovery teachers informed their teaching practices. In the next chapter I delineate the methods these phenomena.
CHAPTER 3

METHODOLOGY

Research Design

While qualitative and quantitative research designs serve different purposes, both are scientific approaches to conducting research in attempts to understand a phenomenon (Creswell & Plano-Clark, 2007; Denzin & Lincoln, 2005). Qualitative researchers tend to examine how social experiences are created and mediated (Bogdan & Biklen, 2007; Denzin & Lincoln, 2005). Quantitative studies tend to emphasize the measurement and analysis of relationships between identified independent and dependent variables. The nature of my study, understanding the nature of Reading Recovery teachers’ reflections and how those reflections inform their practice, lends itself to a qualitative research design.

I used a naturalistic design (Lincoln & Guba, 1985) to guide my research. Within the context of my participants’ natural setting, I observed, described, and interpreted their reflections. Additionally, I used specific grounded theory strategies to examine my data, as this type of research often reflects an interest in understanding a process (Glasser & Strauss, 1999; Schram, 2005). Importantly, qualitative research methods can (and some argue should) be modified to complement and guide research (Charmaz & Mitchell, 2001; Schram, 2005, Strauss & Corbin, 1998).

Strategies of grounded theory I adopted and discuss in the chapter are: pursuit of emergent themes through early data analysis, simultaneous data collection and analysis,
and inductive construction of abstract categories that explain and synthesize these processes (Charmaz & Mitchell, 2001; Schram, 2005). I conducted my naturalistic inquiry using a grounded theory approach to examine two phenomena:

1. What is the nature of Reading Recovery teachers reflections examined multidimensionally?
2. How do the reflections of Reading Recovery teachers inform their teaching practices?

Participants

In the fall of 2008, two participants were purposefully selected from a list of 97 Reading Recovery teachers in Kingston County (pseudonym), the largest school system in the southeastern state and recognized as one of the most ethnically diverse. The ethnic makeup of the student population during the 2006-2007 school year was 26.4% African American, 10.3% Asian American, 38.8% Caucasian, 20.6% Hispanic, and 3.7% Other. The percentage of students eligible for free and reduced lunch was 39.6%; however, in some schools the percentage may reach as high as 95%.

Sampling Procedures

The two participants chosen, Dee (pseudonym) and Kim (pseudonym), fit the research sampling procedures developed and agreed upon by the researcher, the Executive Director of Reading Recovery, and the three Reading Recovery Teacher Leaders in Kingston County. Sampling criteria and justification are outlined below.

1. The Reading Recovery teacher must have taught Reading Recovery for 2 or more years to ensure participants have been fully trained and are experienced implementing Reading Recovery lessons with children.
2. Her/His success rate with children is above the national average, determined by students reading levels and release rate of students (i.e., students succeeding in program).

3. The Reading Recovery teacher is identified by the University Leader and Teacher Leaders as an exemplary “reflective practitioner” based on observed lessons, conferences, written documents, and experience with colleagues. “Reflective practitioner” was defined as an individual who: 1) reflects during meetings with teacher leaders and contact sessions (both with and without support from teacher leaders); 2) has consistently shown evidence of reflecting in written documents; and 3) conversationally reflects during “behind the glass” work.

4. One participant from a school with high coverage of Reading Recovery teachers (i.e., 5 or more Reading Recovery teachers) and one participant from a school without other Reading Recovery teachers or similar networks (i.e., Reading Recovery teacher is not involved in a Critical Friends Group or reflective teacher group in the school). By including participants from various coverage levels, data may reflect contextual factors influencing reflection.

5. The participants were willing to participate in the study.

Description of Participants

Dee. Dee is an African American woman, married, in her mid-30s, with a 3-year-old daughter. She taught second grade in New York, where she received her Bachelor’s, for three years. Prior to moving to the area, Dee taught in a neighboring county for a year and a half, moving to another neighboring county where she taught second grade for five years. It was during this time she attended a local university to obtain her Master’s
degree. While attending classes she saw a flyer about Reading Recovery and was intrigued. She kept hearing people say the training “changes your life.” She attended the informational meeting and decided to go through the training. Dee was hired at Smith Elementary School, in Kingston County, where she has been a Reading Recovery for the last seven years. She shares a trailer, as a classroom, with two other Reading Recovery teachers. Based on my observations of Dee’s instruction and reflective practices, I would describe her as an educator who observes children’s actions and reflects on the best strategies to use with them.

Kim. Kim is a White woman, married, in her early 40s, with a daughter in 5th grade and a son in 8th grade. She received her Bachelor’s and Master’s degrees before her training in Reading Recovery. Her first year on the job, she taught Spanish to kindergarten through fifth-grade students. After a year there, Kim taught first grade for three years. She then took off three years to raise her own children. She returned to school in 2001 and went through the Reading Recovery training, she described as an “incredible, unbelievable experience.” Kim has been a Reading Recovery teacher for the past eight years at Crest Elementary School in Kingston County. Kim is the only Reading Recovery teacher at Crest. Though much smaller than a typical classroom, Kim does have a room of her own. During my initial meeting with Kim we talked about opportunities to reflect collaboratively. She laughed and said, “Here, it’s just me, myself and I and we always agree.”

My role as researcher. My role as a researcher was to collect and examine data from my participants to understand my research questions (Merriam & Caffarella, 1998). I believe, as many researchers argue, the researcher and participant(s) are always
interacting and influencing one another (Angrosino, 2005; Denzin & Lincoln, 2005; Hammersley & Atkinson, 1996; Lincoln & Guba, 1985). Although I tried to bracket my biases (Bogden & Biklen, 2007), I understand previous experiences contributed to how I understood my participants. Because of this I worked to build a relationship with my participants fostering trust (Strauss & Corbin, 1998). Additionally, my role as a researcher included being responsive to environmental cues, collecting information in multiple ways, perceiving situations holistically, processing data as soon as it became available, providing immediate feedback and requesting verification of data, and exploring any unexpected responses or emerging themes (Lincoln & Guba, 1985).

Furthermore, I have also been conscious of my role as a researcher when making interpretive decisions. I conducted two member checks, the first occurred during data collection and the second after all data was analyzed resulting in additional data sources (Bogdan & Biklen, 2007). The purpose of these member checks was to corroborate and expand on emerging themes and findings. While I have shared my thoughts with the participants and asked for their feedback, transcribing, analyzing, and deciding what was important have been an individual undertaking.

Krieger (1996) warned us “that efforts to avoid the role of the self are, essentially, a form of self-deception” (p. 179). Understanding that my own prior experiences as an educator (and a human) play a role in every facet of my research, I was cognizant of this throughout. My role as a researcher influenced my chosen theoretical framework, my observations, my analysis, and ultimately my findings. I recorded memos after each set of observations and peer debriefing with colleagues where I contemplated my experiences, speculated about theorizations, and recorded biases (Glaser & Strauss, 1999). These
memos helped me plan and theorize on a large scale, emphasizing “think pieces” that captured my wonderings and revealed my interactions with participants. Additionally, I reflected in my researcher log after each coding session to expand on my reflective memos with my data in mind. My goal was to trace my role as a researcher throughout this journey in the form of an audit trail. Though discussed in more detail later, I also conducted peer coding sessions with colleagues who have experience using qualitative research designs and are familiar with reflection.

Setting

Smith Elementary School. Published data on this school indicated the average number of years teachers have been teaching is ten. Fifty-six percent have a Master’s degree. The staff serves over 1,500 students, 64% of whom qualified for free or reduced lunch at the time of the study. The racial and ethnic population is highly diverse with 46% African American, 29% Hispanic, 15% Caucasian, 5% Asian/Pacific Islander, 5% Multiracial and less than 1% American Indian. Students at Smith Elementary School have made Annual Yearly Progress (AYP) the past three years in a row. The school, built in 1993, is relatively new; however, as a result of increased school enrollment from 1993-1998 10 trailers were added to house students. Though a new school opened up close by, and the student population declined, the trailers remained and are now home to the Reading Recovery teachers.

Dee shares a trailer with two other Reading Recovery teachers. She works in a small “cubicle.” She has space for her teacher’s desk and a small rectangular table where she works with her students. Though small, she has decorated her space with student’s art work and pictures of her family. She has children’s books, writing utensils and numerous
literacy mediums (e.g., magnetic letters, foam letters, dry erase markers, white boards, journals) on the table where she works with children. It can be loud in the trailer when the other two Reading Recovery teachers are teaching lessons as the same time. No one appears to notice the noise while engaged in a lesson. The other Reading Recovery teachers are located in the two other trailers located right next to Dee’s. Smith has a total of six Reading Recovery teachers at the school because of federal funds secured for and the program.

_Crest Elementary School._ Crest Elementary has received the Governor’s Silver Student Achievement award for making Annual Yearly Progress (AYP) the past two years in a row, with 25% of the school population exceeding standards. The ethnic make-up of the 958 students is diverse with 54% Caucasian, 22% Asian/Pacific Islander, 14% African American, 5% Multiracial, 4% Hispanic, and less than 1% American Indian. Only seven percent of the students at Crest receive free and reduced lunch, a stark contrast to the county’s 50% average. Thirty-five percent of teachers have a Master’s degree. Published data on this school indicated teachers’ years of experience average eleven years.

Built in 1988, the school was added onto the following year to accommodate an overflow of students. Kim has a small room of her own. About a quarter of the size of a regular classroom, she has decorated it to have a “cozy” feel. There are many children’s books on shelves and live plants around the room. Often, she uses floor and table lamps to light the room. She works at a kidney shaped table with her students. Her classroom is usually quiet, as the door to the hallway is closed while she teaches. She is the only Reading Recovery teacher at her school because less funding was provided the program.
Data Sources

I used five sources of data in this study to understand the nature of Reading Recovery teacher reflections and how those reflections informed their teaching practices: 1) fieldnotes from 32 classroom observations; 2) fieldnotes from Teacher Leader meeting and Continuing Contact Session; 3) 48 teaching artifacts; 4) 4 interview transcripts; and 5) 4 member check transcripts. Each data source was purposefully and uniquely selected as described below.

Fieldnotes from Classroom Observations

Observation is a fundamental and important method in all qualitative research (Marshall & Rossman, 2006). It is used to understand complex interactions in natural social settings (Bogdan & Biklen, 2007; Marshall & Rossman, 2006). As a participant observer, I observed Reading Recovery teachers two consecutive mornings a week from the beginning of October 2008 through November 2008 (eight weeks) while they taught a thirty-minute lesson to a child using the Reading Recovery program format (Lincoln & Guba, 1985).

These daily lessons typically followed the same lesson format or pattern: (1) rereading two or more familiar texts; (2) rereading yesterday’s new book and taking a running record; (3) working with letter identification and breaking words into parts; (4) writing a story; (5) hearing and recording sounds; (6) reconstructing the cut-up story; (7) listening to a new book introduction; and (8) reading a new book. While lessons follow this same general pattern, Reading Recovery teachers design each lesson to meet the child’s reading and writing abilities and needs. New books are carefully selected and introduced based upon the teacher’s records, reflections, and observable aspects of the
child’s reading and writing strategies (Clay & Cazden, 1990). During the first observation, Dee and Kim introduced me and told the child that I was there to watch her teaching. However, I was as unobtrusive as possible, sitting away from the two and observing as opposed to interacting during the lessons with children (Angrosino, 2005).

I conducted these observations using Angrosino’s (2005) three procedures of increasing levels of specificity: 1) descriptive observations (observer tries to take in everything, leaving nothing for granted); 2) focused observations (observer hones in on material/actions/objects pertinent to her/his focus or defined categories); and 3) selective observations (observer) directs her/his attention to a very specific piece of her/his focus or defined category). My observations initially began as descriptive. As a researcher, including a detailed description of contextual surroundings was important. I recorded teachers’ behaviors, actions, direct quotes from the child and teacher. Observations became more focused after I spent time in my participants’ classrooms. Though I listened to both the child and the teacher I observed Dee and Kim most often. I observed and noted times when they appeared to be recording reflections. I noted times they seemed to be reflecting “in the head.” I observed their body language and posture. I recorded specific events of every lesson as they related to previous observations and examples of reflection informing practice. I became more selective during my observations, focusing on how teachers’ written reflections captured in their artifacts were observed in future plans and their teaching practices. My fieldnotes were the systematic recorded observations of events, behaviors and artifacts in the teachers’ classroom (Marshall & Rossman, 2006).
Fieldnotes from Teacher Leader Meeting

Another opportunity to observe Reading Recovery teachers occurred during a meeting with Kim’s teacher leader, Sarah. Teacher leaders are trained at a University training center for a year to prepare them to support Reading Recovery teachers in their schools, as well as help them understand issues surrounding program implementation and delivery. The standards and guidelines of Reading Recovery in the United States require that trained teachers have at least one annual meeting with their teacher leader as part of their ongoing professional development. They are also encouraged to request additional meetings for guidance and assistance. A teacher leader may also choose to conduct a teacher leader meeting, as these are set in place to support the Reading Recovery teacher. Teacher Leaders do continue to teach children one-on-one which serves to provide them with greater understandings of the issues and concerns Reading Recovery teachers encounter in serving young children struggling with literacy acquisition. The teacher leader is a resource for the teacher to help examine her/his practice. The teacher leader typically arrives before the Reading Recovery teacher’s lesson with a child. The two discuss where the teacher leader should attend during the lesson. The Reading Recovery teacher then teaches a lesson to a child as she normally does. After the lesson the student leaves for a moment and the teacher and teacher leader briefly reflect on their observations. The teacher leader then discusses some ideas the teacher may use in future lessons and models them for the teacher with the student who is called back into the classroom. After this modeling session the teacher leader and teacher talk in more detail about their observations and the teacher leader prompts the Reading Recovery teacher to
think about her own beliefs and practices as they related to the Reading Recovery framework and Clay’s theory of literacy.

During the duration of the study, only one teacher leader meeting occurred. Kim requested Sarah observe a lesson with a child who was not making the expected gains typical of a child in Reading Recovery. Upon introducing myself to her and explaining my role in the meeting (which was to be as unobtrusive an observer I could be), Sarah explained the purpose of these meetings is to help the teacher reflect on the student and herself and Clay’s theoretical framework. I observed Kim and Sarah’s meeting about the student before the lesson when Kim described a sense of “hopelessness” and a “need” for Sarah to provide her with some strategies and insight into how she could help the child move to the next level. During this time I took descriptive fieldnotes of the two, recording quotes from each, body language, and actions. When the lesson began, I observed Sarah watching the lesson Kim taught to her student. These fieldnotes differ from my typical fieldnotes during a lesson with children because I was recording the way Sarah was observing and noting Kim’s actions as well. My attention was split between Sarah, a new addition to lessons with children, and my typical recording of fieldnotes with Kim. In addition, I continued to record fieldnotes of their culminating conference about the lesson. This meeting provided an additional lens through which I observed Kim reflecting. Since she is the only Reading Recovery teacher at her school, I had not had the opportunity to observe her collaboratively reflect with anyone.

Fieldnotes from Continuing Contact Session

Additionally, Reading Recovery teachers are required to attend at least six continuing contact sessions per school year. These professional development sessions
provide collaborative opportunities for teachers to participate and reflect with one another about individual children, their own teaching practices, and ways to integrate new knowledge into their teaching, and examine ways that literacy research might influence their practice (Clay, 1993a; Gomez-Bellenge et al., 2005). District-level teacher leaders, once Reading Recovery teachers themselves, facilitate Reading Recovery teacher’s professional development opportunities every few months. Ongoing professional development is a crucial component of the program. Reflection is the cornerstone of these contact sessions which researchers have found to have a positive impact on Reading Recovery teachers’ knowledge of literacy learning and development, teaching effectiveness, and decision making (see Cox & Hopkins, 2006 for a full list of studies).

Only one Continuing Contact session was held throughout the duration of my study and unfortunately, only Dee was in attendance. I recorded descriptive fieldnotes of Dee throughout the session. I recorded her direct quotes, body language, and actions throughout the meeting. I also recorded quotes from colleagues, as understanding the conversation in full would help me understand Dee’s contribution to the conversations. Being that Kim was absent from the meeting, I used the fieldnotes cautiously. Instead of including them as a significant data source, I used them to corroborate findings and search for instances of negative cases (Lincoln & Guba, 1985).

Teacher Artifacts

Teacher artifacts represent written documents recorded during and after lessons with children (See Appendixes A-C). Reading Recovery teachers are required to collect data on their students daily in the form of running records (Appendix A) and daily lesson record sheets (Appendix B). Unique to this study, participants were also required to
complete Predictions of Progress forms (Appendix C) twice a month. I collected copies of each artifact when completed. Participants recorded their reflections (either during or after action) on their written respective forms. Each artifact exemplified a different purpose and kind of reflection detailed below.

Running records. (Appendix A). Reading Recovery teachers are supposed to complete a running record form daily. This form includes a brief synopsis of student activity with a section for comments on overall student progress. The majority of the form is objective; however, the comments section provides space for participants to reflect on their observations of the child and their own teaching strategies, successes, and/or challenges (Clay, 2005). Additionally, participants must reflect on the type of errors or process guiding students self-correcting in columns on the running record. Specifically, the form has a space for teachers to analyze student’s errors and self-corrections; namely attending to how they have used (or neglected to use) meaning, structure or syntax, or visual cues. These reflections are guided by their observations and their prior experiences working with the students. Running records, completed individually, provide a space where teachers are asked to reflect-in- and on-action.

Daily lesson record sheets. (Appendix B). Reading Recovery teachers complete the Daily Lesson Record Sheet during each lesson. The purpose of these forms is for the teacher to record how the child responds to the teachers’ scaffolding during lessons (Clay, 2005). Participants recorded objective notes, such as specific prompts given, as well as subjective notes that are observations and reflections. The teacher may reflect on a strategic activity the child is using, or strategic activity to use in future lessons. For example, Kim observed a student having difficulty writing “and.” She noted this point
of difficulty by circling the word, then wrote “How do you spell band, hand, sand” which was the beginning of a word work activity she did with the student immediately following recording this phrase. This data source captured the majority of participants’ reflections-in-action. The daily lesson record sheet should be completed during the lesson; however, participants did reflect and add to the forms after the lesson. They also used the forms to plan the following day’s lesson.

*Predictions of progress.* (Appendix C). Reading Recovery teachers are expected to complete a Predictions of Progress sheet twice a month. Predictions of Progress are completed at the beginning of a child's lessons series after a child has been selected for participation in Reading Recovery and all the initial assessment is completed. The purpose of this form is to maintain a long-term perspective on day-to-day decisions (Clay, 2005). Teacher leaders in this particular county requested Reading Recovery teachers fill out a new predictions of progress form twice a month to help them capture reflection, plan for change over time, and evaluate any new strengths and weaknesses of the child as they emerge. This is unique, as all Reading Recovery teachers are not required to fill this out more than once. In this study, as implemented by their teacher leaders, the predictions of progress form was used as a two-week analysis of areas of growth and areas of need. Only one of my participants, Kim, used this form to reflect on her students and herself at the end of every two weeks. Dee said she reflected within each of her daily lesson forms and her teacher leader had agreed to that approach. Generally, Reading Recovery professionals do use the last column on the back of the daily lesson records to reflect. General practice is that every 3 to 5 days, Reading Recovery professionals are expected to review the records of the student and observe for patterns of
responding in the child and their teaching, reflect and determine what changes are needed for the student and their teaching. Predictions of progress forms are open-ended and summative; however, they are guided by prompts focusing on the child’s strengths, needs, and teachers’ next steps. Table 1 provides a brief description of the teacher artifacts and the varying strengths they offer when trying to understand the nature of Reading Recovery teachers’ reflections and how those reflections inform teaching practices.

Table 1

**Description of Teacher Artifacts**

<table>
<thead>
<tr>
<th>Teacher Artifacts</th>
<th>Collection</th>
<th>Purpose for teachers</th>
<th>Purpose for collecting</th>
<th>Fit for theoretical model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Running Records</td>
<td>Collected daily</td>
<td>- Provides objective material, such as number of correct words read, etc.</td>
<td>- Reflections are child oriented</td>
<td>- Highlights reflection-in-action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provides space for teachers to analyze and reflect on strategic activity used by students</td>
<td>- Reflections capture reflection-in- and on-action</td>
<td>- Results in various types of reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Prompts for reflection on type of error and self-corrections student is making</td>
<td></td>
<td>- Individual reflection</td>
</tr>
<tr>
<td>2. Daily Lesson Sheet</td>
<td>Collected daily</td>
<td>- Teacher created “Lesson plan”</td>
<td>- Reflections are child and teacher oriented</td>
<td>- Highlights reflection-in- and -on-action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Record intent based upon observations and reflections from previous day</td>
<td>- Reflection occur during action</td>
<td>- Could result in any type of reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Reflections are used to inform teaching next day</td>
<td>- Reflections could be done individually or collaboratively</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Captures reflection-on-action</td>
<td></td>
</tr>
<tr>
<td>3. Predictions of Progress</td>
<td>Collected bi-monthly</td>
<td>- Reflect on child and self over two weeks</td>
<td>- Reflections are open-ended</td>
<td>- Highlights reflection on action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reflect on “big picture” as opposed to narrow scope of daily lesson</td>
<td>- Reflections are summative, but on a two week basis</td>
<td>- Results in various types of reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Focus of reflection can be child- or</td>
<td>- Could be individual or collaborative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Interviews

Qualitative interviews permit open-ended questions that allow for individual variation (Bogden & Biklen, 2007). Because my observations only allowed me to infer when and what my participants were reflecting about and how they were informing their practice, interviewing them about their beliefs about reflection became important. I conducted two semi-structured thirty-minute interviews, one at the end of 4 weeks and one at the end of 8 weeks.

The purpose of the first interview was to collect data regarding participants’ beliefs associated with reflection and how they define it. The semi-structured interview protocol consisted of questions such as: (1) What is it about you as a teacher that I need to know as I try to understand you and reflection?; (2) Define for me your definition of reflection, and (3) How does reflection inform your teaching?. By probing and questioning, I asked my participants to explain the role of reflection in their teaching. The intent of the second interview was to capture the participants’ voices associated with the reflective experiences during and after lessons with children. The second semi-structured interview protocol consisted of questions such as: (1) Talk me through how you reflect during a lesson with a child.; (2) How (if at all) do those reflections differ from what you reflect about after the lesson?; (3) What (if any) does reflecting with peers play in your teaching practices? Because I already knew Reading Recovery teachers are trained and required to be reflective, these questions were less leading and during each interview I
probed into their responses to these questions. Additionally, all interviews were audi-
taped, allowing me to focus on the conversation occurring during the interview and
immediately transcribed verbatim to include participants’ words and utterances. This data
allowed for a more in-depth understanding of my participants’ perspectives on reflection
and how they believe it informs their practices. Therefore, unlike the data collected from
the observations and teacher artifacts, the interviews provided the participants’ stories
and beliefs about the nature of reflection and the ways reflection informs their practice
and allowed me to explore more deeply the theoretical framework of Reading Recovery.

Member Check Transcripts

Lincoln and Guba (1985) assert member checking is a critical technique for
establishing credibility and validity. I conducted member checks with each participant
twice; the first at the end of four weeks to corroborate or disconfirm emerging categories
and their dimensions and properties and the second after all data had been analyzed to
share my findings. These member-checks were also recorded and transcribed verbatim,
becoming an additional data source for more examination of the nature of my partici-
pants’ reflections and how those informed their teaching practices. Informal member
checks occurred during normal conversations with participants after lessons with children
and contact sessions and those conversations were recorded in fieldnotes from observa-
tions. Their comments served as a check to the viability of my own interpretations.
Because my research involved so much interpretation, allowing my participants to
validate the accuracy of my findings or expand on them, alleviated some fear of bias or
incorrect interpretation when analyzing data and reporting my findings (see Figure 4).
Data Collection

Data were collected for 8 weeks (with the exception of the final member check), from October through November, during the 2008-2009 school year. Guided by a naturalistic design (Lincoln & Guba, 1985) to identify the nature of Reading Recovery teachers’ reflections and how they informed their practice, I used several grounded theory strategies to collect data: (a) participant observations, (b) teacher artifacts, (c) semi-structured interviews, and (d) member checks. Below is a detailed description of my data collection methods and the strengths and limitations of each.

*Figure 4. Data Source Delineation.*
Participant Observations

I observed my participants two consecutive days a week during their thirty minute lessons with children (n = 16), conducting 32 observations total. These two consecutive days are considered a set. I was as unobtrusive as possible during my observations. While observing in Dee’s classroom I was able to sit out of the line of vision of the child, but in a place I could see Dee’s facial expressions. The children I observed in Dee’s classroom never looked back or made eye contact with me during lessons; however, I would always say hello and goodbye as they entered and exited. In Kim’s classroom I sat at the corner of a rectangular table that was positioned in front of the kidney shaped table where Kim taught. Though I was in the line of sight of the child, I avoided making eye contact during lessons. I also greeted each child during my observations with Kim. During observations I was able to record instances of teacher reflection and my participants’ actions immediately following. Additionally, observing participants consecutively was purposeful because my participants would often reflect during one lesson and use those reflections to plan for the following day’s instruction. Observing the lesson the following day with the same child afforded me the opportunity to understand how reflections informed their practices. For example, Dee observed a student replacing the word “this” with “his” and recorded the error on the child’s Running Record Sheet. She then reflected immediately on the type of error he was making, meaning-driven, visual, or structural, framed by her observations of the child. She chose structural. After the lesson she reflected “Neglects structure. He monitors on structure occasionally, but not consistently. At points of difficulty he begins to search visually, but his error is on the text…” During the following day’s lesson I observed Dee purposefully provide strategies for the student
to use to help him attend to the structure of a book during reading, word work, and writing. Though observing the teachers reflections during a lesson helped me understand the nature of my participants’ reflections, there were many instances that observing consecutive lessons aided in understanding how those reflections were informing their practice.

During these observations I recorded field notes to be expanded upon immediately leaving the school (Bogden & Biklen, 2007). Additionally, I kept a tape recorder in my car. Upon leaving I would dictate my recollection of the lesson from the beginning, including facial expressions, body language, and precise language and action used by both the teacher and child. Immediately after arriving home, this detailed description of the each lesson was transcribed, resulting in fieldnotes. These observations were used in conjunction with teacher artifacts to discern instances of reflection and to understand actions following that may were informed by these reflections.

Additionally, I memoed after each set of observations for several reasons. Methodological notes were written to document my research decisions, reflect on my presence in the room and any biases I might have. Theoretical notes were recorded to help develop my hypotheses and understandings of pattern in the data. Furthermore, after coding each set of data I added descriptive memos to my reflection log that included a summary of findings or additional wonderings from the documents collected.

Teacher Artifacts

The three teacher artifacts used, running records, daily lesson sheet, and predictions of progress, were completed for different purposes at different times. Running records and daily lesson record sheets are both completed daily. predictions of progress
forms are completed twice a month. Therefore, a total of thirty-two daily lesson record and running record forms and four predictions of progress were collected. At the end of each lesson teachers would make a copy of the daily lesson record sheet and running record form. Additionally, if teachers added anything to the forms after the lesson they would make an additional copy I would collect the following observation. Copies of the predictions of progress sheets were also made by the teacher upon completion and given directly to me.

*Semi-structured Interviews*

An interview was conducted with each participant half way through the study (Week 4) and again at the end (Week 8). Each interview lasted thirty to forty-five minutes and was audiotaped for accuracy and transcribed verbatim. These interviews were held in the teacher’s classroom. In Dee’s case, there were no other teachers in the room when we conducted our interview. The teachers choose a convenient time for them to meet and I planned their interview time accordingly. Additionally, after each interview I wrote a memo briefly summarizing the interview and describing my own thoughts, wonderings, and additional patterns that had emerged in the interview (Merriam & Caffarella, 1999).

*Member Checking*

I also conducted member checks with my participants twice during the study. The first member check, lasting thirty minutes, occurred half way through the study (Week 4). I met with each participant and shared emerging categories and properties rising from within those. For example, I presented participants with a copy of my fieldnotes and codes generated from the fieldnotes. We discussed the patterns and both participants
confirmed and expanded upon emerging categories. These member checking meetings were audiotaped and transcribed verbatim, becoming an additional data source.

After data were collected and analyzed, findings were shared with each participant to discuss my interpretations and findings. The final member check lasted between 30 and 40 minutes. I shared with them the major findings of the study and allowed them to confirm, expand upon, and clarify the results. Just as the first member check transcripts served as an additional source of data, the transcripts from this meeting did as well.

Every data collection strategy has certain strengths and limitations in research. I believe my particular data collection methods complement each other. For instance, observations provide a check for what participants share in their interviews. Interviews on the other hand, afforded me the opportunity to go beyond the observation to explore thoughts and feelings (Patton, 2002). When triangulating data the limitations of each independently are offset when combined (Patton, 2002). The following table lists the strengths and possible limitations of my methods of data collection:

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Total Number of Documents Per Participant</th>
<th>Total Number of Data Sources Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fieldnotes from Observations</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>(including fieldnotes from teacher leader meeting and contact session)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running Record Sheets</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Daily Lesson Record Sheet</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Predictions of Progress Form</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Semi-structured Interviews</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Member checks</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
### Table 3

**Strengths and Limitations of Data Collection Techniques**

<table>
<thead>
<tr>
<th>Data Collection Techniques</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant Observation</strong></td>
<td>• fosters face-to-face interaction with participants</td>
<td>• leads researcher to fixate on details</td>
</tr>
<tr>
<td></td>
<td>• useful for uncovering participants’ perspectives</td>
<td>• possible misinterpretations due to nature of inferring meaning</td>
</tr>
<tr>
<td></td>
<td>• data collected in natural setting</td>
<td>• dependent on cooperation of key individuals</td>
</tr>
<tr>
<td></td>
<td>• facilitates immediate follow-up for interpretation and clarification</td>
<td>• readily open to ethical dilemmas</td>
</tr>
<tr>
<td></td>
<td>• good for documenting major events, crises, conflicts</td>
<td>• difficult to replicate</td>
</tr>
<tr>
<td></td>
<td>• useful for describing complex interactions</td>
<td>• data more affected by researcher presence</td>
</tr>
<tr>
<td></td>
<td>• good for obtaining data on nonverbal behavior and communication</td>
<td>• can cause discomfort to participant</td>
</tr>
<tr>
<td></td>
<td>• facilitates discovery of nuances in culture</td>
<td>• too dependent on participant openness/honesty</td>
</tr>
<tr>
<td></td>
<td>• provides for flexibility in formulating hypotheses</td>
<td>• too artistic an interpretation</td>
</tr>
<tr>
<td></td>
<td>• provides context information</td>
<td>• undermines researcher</td>
</tr>
<tr>
<td></td>
<td>• facilitates analysis, validity checks, and triangulation</td>
<td>• dependent on the researcher’s interpersonal skills</td>
</tr>
<tr>
<td></td>
<td>• facilitates cooperation’s</td>
<td>• dependent on “goodness” of initial research question</td>
</tr>
<tr>
<td></td>
<td>• allows wide ranges of types of data and participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• collects data on unconscious thoughts and actions</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Artifacts</strong></td>
<td>• good for documenting major events, crises, data collected in natural setting</td>
<td>• leads researcher to fixate on details</td>
</tr>
<tr>
<td></td>
<td>• facilitates discovery of nuances in culture, provides for flexibility in formulating hypothesis</td>
<td>• possible misinterpretations because research is inferring meaning</td>
</tr>
<tr>
<td></td>
<td>• provides context information</td>
<td>• documents may be incomplete or examined incorrectly</td>
</tr>
<tr>
<td></td>
<td>• facilitates analysis, validity checks, and triangulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• data easy to manipulate and categorize for analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• easy and efficient to administer and manage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• easily quantifiable and amenable to statistical analysis</td>
<td></td>
</tr>
<tr>
<td><strong>Interviews</strong></td>
<td>• can provide information about participants’ beliefs and ways of thinking</td>
<td>• dependent on cooperation of key individuals</td>
</tr>
<tr>
<td></td>
<td>• useful for exploration and confirmation</td>
<td>• participants may be highly reactive to interviewer effecting what/how much they share</td>
</tr>
<tr>
<td></td>
<td>• provide opportunity for in-depth, probing</td>
<td>• researcher decides what quotes and examples to report</td>
</tr>
<tr>
<td></td>
<td>• have flexibility to follow-up on participants’ responses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• can probe for more details and ensure clarification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• provides high credibility and face validity</td>
<td></td>
</tr>
<tr>
<td><strong>Member Checking</strong></td>
<td>• Useful for further explorations and confirmation</td>
<td>• Participants may try to please researcher by agreeing</td>
</tr>
<tr>
<td></td>
<td>• Increases participant trust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Affords participants the opportunity to challenge, question, corroborate and clarify research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increases researchers credibility</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Creswell, 2003; Creswell & Plano Clark, 2007; Patton, 2002.
Thus, by collecting fieldnotes during observations, teacher artifacts completed during and after lessons, conducting interviews and member checks, the unique strengths of each help to offset potential limitations of using one method alone (Creswell, 2003; Patton, 2002). Additionally, I left open the possibility to modify my research proposal if a significant focus emerged during data collection. In fact, one of the strengths of using a grounded theory approach is the flexibility which allows, even encourages, this exploration, discovery, and creativity (Schram, 2005).

Along with choosing appropriate strategies for data collection, I also addressed the complex process of managing and analyzing data. Rather than linear events, these processes occurred simultaneously throughout my research (Strauss & Corbin, 1998). Following is a description of how data were analyzed throughout the study to address my research questions.

Data Analysis

Data analysis involved working with data, organizing it, breaking it into manageable units, coding, synthesizing, and searching for patterns (Bogden & Biklen, 2007). Data were analyzed to understand the nature of Reading Recovery teachers’ reflections and how those reflections informed their practice. Data analysis was ongoing during data collection using grounded theory methods of open and axial coding (Glaser & Strauss, 1999; Strauss & Corbin, 1998), and continued after completion of data collection. A major strength of using grounded theory methods to answer research questions is that it helps researchers understand processes and relationships, in this case, specifically the process between how reflections informed practice (Charmaz & Mitchell, 2001). Data analysis occurred in four phases.
Phase 1 (Weeks 1-4)

Phase one involved open coding of data during the first four weeks of data collection. Grounded theory methods allow (and require) researchers to compare data continuously (Glaser & Strauss, 1999). Additionally, examining my participants’ reflections needed to be understood as it occurred, not after the fact, so I could compare data to emerging categories. In many cases my participants’ reflections immediately informed their practice; therefore, collecting data and analyzing it before returning to the field the following day helped me narrow my focus and attend more specifically to behaviors and strategies implemented from the previous day’s lesson resulting from reflection. This logic entails going back to data and forward into analysis then returning to the field to gather more data and refine the emerging themes (Charmaz & Mitchell, 2001).

Fieldnotes, interview transcripts, running records, daily lesson record sheets, and predictions of progress sheets were all analyzed using Strauss and Corbin’s (1998) grounded theory technique of open coding. Coding is the first step in developing categories, because it helps the researcher raise analytical questions about the data. Additionally, it served as the analytic process through which concepts were identified and properties and dimensions were discovered in data (Strauss and Corbin, 1998).

I first reviewed field notes, running record forms, daily lesson record sheets and predictions of progress to identify examples, or instances, of reflection. Open coding involved breaking the data into discrete parts (i.e., identified instances of reflection) and comparing them to one another to identify categories (Strauss & Corbin, 1998). These codes were entered into a coding manual where I stored and sorted all of my categories.
As data collection continued, new categories emerged and identified categories grew. Another strength of grounded theory is that these methods demonstrate relationships between categories early on in the data analysis process (Charmaz & Mitchell, 2001).

I further developed each category by memoing about identified properties, or varying characteristics within each. Through early memo-making, I was able to elaborate on properties and dimensions within categories. For example, the following is an excerpt from a memo I drafted after typing up fieldnotes from an observation on November 11th.

I continue to see this merge of both reflection-on and reflection-in-action during lessons. The different aspects of child’s difficulties, needs, or strengths are all emphasized during lessons. Importantly, and I’ll try to word this more clearly than before, it appears Reading Recovery teacher keep the ‘big picture’ reflection in mind but use reflection-in-action to meet the child’s need in the moment, related specifically to that second. It seems that somehow they are able to build on both forms of reflection. During the lesson the reflections often result in a strategy offered, skill repeated, support, or praise. So, they reflect on the child’s needs, strengths, and point of difficulty and then use that reflection to scaffold, praise, model, build confidence…Does this resemble Clay’s self-supporting system…get back out Becoming Literate and Literacy Lessons and read about Clay’s notion of how this happens.

Memoing then became an integral part of the data analysis process. Memos were my own record of analysis, thoughts, interpretations, questions, and directions for further data analysis (Charmaz & Mitchell, 2001; Strauss & Corbin, 1998). Also called microanalysis, memoing helped to outline properties and dimensions (Charmaz & Mitchell, 2001).

Properties vary along a categorical continuum or set of nominal categories (Rowe, 1995). In this study open coding was used to identify properties, which were use to describe the nature of my participants reflection. These properties helped design subcategories that highlight concepts pertaining to each category, thus refining and clarifying emerging themes, as well as making the recursive process of data collection
and data analysis more systematic. Further, open coding involved identifying a dimensional range for each property. For example, an important property of the nature of Reading Recovery teachers’ reflections was the theoretical framework of Reading Recovery which bound their reflections. When I examined this property more intensively, I identified a number of dimensions including training and professional development, and the structure of the program fostering this.

More specifically, after each day’s observations I read through each fieldnote looking for any words, sentences, phrases, incidents, patterns of behavior, subjects’ ways of thinking, and events that repeated themselves or stood out. I looked through my data for regularities and patterns as well as information that covered my topic. In conjunction with fieldnotes, the same analysis strategy was used with participants’ running records and daily lesson record sheet. As I found these, I wrote down words or phrases to represent the sorting of my descriptive data. This list represented coding categories. For example, the category “Reflection on Point of Difficulty” (coded R on P.O.D.) emerged when evidence of reflection occurred in both participants when a child skipped a word, replaced a word, could not read a word, or appealed for help. Reading Recovery uses the term “point of difficulty” to represent instances like this during a lesson. For a more detailed listed of coding categories see Appendix D.

Categories were then entered into the coding manual and their respective examples were notated beside the code for the category. As I continued to analyze my data sources, categories were added and refined, resulting in subcategories and new categories. Furthermore, I memoed within my coding manual to expand on and describe the characteristics of each category. For example, after entering an example of the code
RRA (Reflection on Action), “Wrote known words with more fluency-whoo-hoo! Working on becoming more independent with problem solving.” I wrote this wondering along side the entry: “Dee wrote this after comparing the running record and notes taken on the daily lesson record sheet after the child left the room. This is her reflection of the lesson and a goal for future lessons.” Furthermore, after codes were entered into the coding manual and some codes were collapsed and combined, I entered my process and reflections about the emerging themes into a reflection log (see Appendix E for an example). Figure 5 represents a coding sample from my first phase of data analysis. I’ve included a code, an excerpt from my memo, and an example of how this code was entered into my coding manual.

Additionally, at the end of the first four weeks I shared emerging categories and their properties and dimensions with each participant in the form of member-checking. This member check helped to support and clarify emergent categories during open coding and contribute to properties and dimensions being identified through memoing. Data from these meetings was used to corroborate emerging findings. Both participants supported and expanded on emerging categories.
**Example of Open coding:** (Dee) D.L.: “Points with finger at p.o.d.” (point of difficulty) “Finger distracting him from using eyes to break word.” “Prompts to keep finger out and keep eyes on word.” -Code (R on p.o.d.)

**Excerpt of Memo related to open code:** I’m noticing a lot of specific praise and modeling that appears purposeful and linked to the areas the student is experiencing at point of difficulty. Are these prompts evolving from reflection on what the student is doing immediately (reflection-in-action) or is this due to her reflection on action that she planned accordingly to introduce today? (10/16/08)

**Example of Open Code Entered in Coding Manual**

<table>
<thead>
<tr>
<th>Code</th>
<th>Document</th>
<th>Location</th>
<th>Quote</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>R on p.o.d.</td>
<td>3DLA(11/16)</td>
<td>second column</td>
<td>“Points with finger at p.o.d.” (point of difficulty) “Finger distracting him from using eyes to break word.” “Prompts to keep finger out and keep eyes on word.”</td>
<td>Notes that at points of difficulty M is making errors on the text and then searching. Noting she believes this is a visual error and he's looking everywhere else. Word work seems to be a result of a mixture of reflection-in-action at the child’s point of difficulty and reflection-on-action, specifically meeting the needs of a child. Need to ask my participants if they plan what they are going to do ahead of time in the word work section or if they wait to see what the student needs specifically during the lesson.</td>
</tr>
</tbody>
</table>

*Figure 5. Coding Sample from Phase 1 of Data Analysis.*

**Phase 2 (Weeks 4-8)**

Phase two involved open and axial coding of data during the last four weeks of data analysis. This included the continued analysis of fieldnotes, interview and member check transcripts, and the teacher artifacts to further develop categories. Axial coding
involves making connections between, or “linking” a category and its subcategories (Strauss & Corbin, 1998). This type of data analysis is a combination of inductive and deductive thinking (Glaser & Strauss, 1999). The purpose of axial coding is to “reassemble” data that is “fractured” during open coding (Strauss & Corbin). These connections include understanding how the context in which the phenomenon occurred, interactions related to the phenomenon, and the consequences of those interactions are all related. Axial coding served as a means for beginning to describe the complex relations between properties as well as the various ways teachers’ reflections informed their practice in relation to the context in which it occurred. Additionally, during axial coding I generated and refined hypotheses about the ways reflections inform Reading Recovery teachers’ practices.

Specifically, I continued to open code my fieldnotes and teacher artifacts to identify examples of reflections and ways those reflections informed teachers’ practices. Next, I examined interview transcripts to align my participants’ views related to reflection with my own observations. I reviewed the remaining four sets of fieldnotes, interview transcripts and sixteen teacher artifacts, to identify all instances of reflection. I continued to enter these phenomena into my coding manual. Since coding categories already existed, some were refined by turning them into subcategories. For example, subcategories emerged within the category reflection-in-action (RIA). The subcategories were: RIA at point of difficulty, RIA at point of difficulty (strategic activity offered), RIA at point of difficulty (support offered), RIA at point of difficulty (modeling provided). Sub codes were also delineated resulting in additional wonderings.
Memoing within the coding manual and including my own reflections in the researcher log were initial steps into axial coding where I examined my data in pieces and tried to make sense of its meaning as a whole. For example, in my researcher log on November 18th I recorded:

There’s a new notion of this self-supporting system that Clay discusses as being key for an independent reader. I’m seeing Dee foster this through her reflections on Laura’s needs. I need to go back through the data and look for other instances of this. This is the ultimate goal for students according to Clay and I see Dee fostering it. Does this only happen before a child is released? Why this shift in support from teacher to student?

I then made comparisons between categories and their subcategories by their properties and dimensions to examine these and other wonderings. While open coding continued to result in defining properties and dimensions of categories and memoing offered clues as to how categories relate, the actual linking took place not descriptively but at a conceptual level which occurred during axial coding (Strauss & Corbin, 1998).

Figure 6 represents a coding sample from the second phase of data analysis. I have purposefully drawn the same category into phase two that I used in my example of open coding in phase one. This is simply a representation of how I analyzed all of the data; however, for clarity I am highlighting the same code which became a category because of all the representative codes associated with it, and then a theme (which I highlight in phase three). The axial coding in this theme illustrates the conceptual thinking behind a category. Instead of simply highlighting that reflection often occurs at a
point of difficulty, axial coding highlighted a three-step reflective process within the reflection at a point of difficulty.

**Axial Coding:** Pattern of reflection-in-action: (Dee) D.L.: “Points with finger at p.o.d.” (*What is the child doing?*) “Finger distracting him from using eyes to break word.” (*What does the child need?*) “Prompts to keep finger out and keep eyes on word.” (*What do I need to do?*)

Memo: Looking over the category and subcategories of reflection in action a pattern emerges within which both participants reflect. They observe and reflect on the child, reflect on what the child then needs, and then what she needs to do about it. This is corroborated in their interviews as well. When they talk about the way they reflect they focus on this same pattern. (11/18/08)

*Figure 6.* Coding Sample from Phase 2 of Data Analysis.

Additionally, I had several peer debriefing sessions with colleagues to review my data collection and analysis strategies. Colleagues who were familiar with my data analysis strategies and the topic of reflection were provided with two sets of fieldnotes from each participant and my memos to provide bias-checks and provide additional feedback. Before providing my colleagues with fieldnotes I discussed my own role as a researcher engaged in this inquiry. I wanted them to look at fieldnotes and my memos because many reflections participants were engaged in were “in the head.” I wanted to ensure I was not assuming too much about their reflections or making incorrect assumptions about observations during the lessons. Each peer debriefing meeting was held on campus and lasted approximately one hour. These meetings were audiotaped and transcribed verbatim to ensure I could attend to the conversation during the peer debriefing without missing important details. These peer debriefings helped to
corroborate many of my findings as well as illuminate instances I was assuming instead of actually observing. At the end of eight weeks I conducted a formal peer check with a colleague who analyzed interview transcripts and one set of fieldnotes from both participants using my coding manual. After she analyzed the data we met to discuss our findings. The results from this peer debriefing session indicated that categories were congruent with the data and descriptions of the categories were expanded. For example, in the beginning of data analysis she found that I had been trying to pigeon-hole codes into specific categories related to time, type, and context, instead of digging more deeply into the significance of the code. This formal peer debriefing was recorded and transcribed verbatim.

Phase 3

Phase three began after the close of data collection (with the exception of the final member check); when I continued the use of open and axial coding and memoing. Through axial coding I laid out the properties of categories, a task that began during open coding. In particular, I created mini-frameworks (Strauss & Corbin, 1998) to illustrate relationships between concepts. Figure 7 is an example of one mini-framework representing the advanced stages of data analysis on the same categories that were highlighted in the figures above. I’ve drawn the same category throughout all three phases to understand the progression of data analysis through open coding, axial coding and the linking of these findings on a conceptual level.
Figure 7. Data Analysis Sample from Phase 3.

These mini-frameworks helped me think through possible relationships between and within concepts. This strategy also illustrated gaps in my evolving findings where I returned to and analyzed data beginning with the categories developed from my data and refining or adding to them as needed. For example, I recognized the context within which my participants reflect is situated within the framework of Reading Recovery. Data needed to be reanalyzed for examples of reflection as they related to the philosophy of Reading Recovery.

Once I reached theoretical saturation (Glaser & Strauss, 1967), meaning no new or relevant data emerged within categories and categories were developed in terms of their properties and dimensions, I reviewed the first and last two sets of fieldnotes and
teacher artifacts for negative cases (Lincoln & Guba, 1985). This technique allowed me to use previously analyzed data to challenge and refine analytic categories and hypotheses (Rowe, 1996). This negative case analysis entailed checking initial codes against final categories, their properties and dimensions. No negative cases were found.

**Phase 4**

During phase four of data analysis I reformatted the mini-frameworks to link them into major findings, discussing the similarities and differences between them. As this occurred, I found the nature of my participants’ reflections and how they informed practice are interwoven. I cannot talk about the nature of their reflections without addressing how they informed their teaching practices. This final linking at a conceptual level of my categories provided both depth and structure related to understanding how my participants’ reflections inform their teaching practices.

Lastly, I met with both participants for a final member check. I shared with each participant the findings of the study and invited them to expand on, confirm, or disconfirm my findings. I also asked open ended questions about the findings to corroborate the results. Both participants agreed with the findings. In fact, Kim said she loved reading about how important reflection is in her teaching practices, saying I had “hit the nail on the head.” Dee expanded on the notion of the importance of collaborating with others in helping her to be the teacher she is today.

Figure 8 is a visual representation of the data analysis process that occurred during and after data collection to understand the nature of Reading Recovery teachers’ reflections and how they informed their teaching practices.
Trustworthiness

Trustworthiness (Lincoln & Guba, 1985) was established in various ways. Lincoln and Guba have suggested a number of the data-collection and analysis techniques described above that work to establish confidence in the credibility of qualitative studies conducted in a naturalistic paradigm (Bogden & Biklen, 2007; Lincoln & Guba, 1985). These include (a) triangulation of data sources (e.g., observations, interviews, teacher artifacts), (b) triangulation of data collection techniques, (c) negative case analysis, (d) multiple member checks, and (e) use of an audit trail. I also used several research
procedures designed to help me reflect on the impact of my theoretical perspectives and participatory role (Rowe, 1995). During data collection I held regular meetings with a professional colleague outside the study who served as a peer debriefer (Lincoln & Guba, 1985). After data analysis was completed a second colleague reviewed selected portions of fieldnotes and interview transcripts to determine whether my conclusions were supported in the data. These colleagues had completed graduate degrees in early childhood education and were familiar with the type of qualitative inquiry used in this study.

I attempted to establish transferability by using clarity and description when delineating my methodology and results in ways that other researchers could apply my research methods or techniques. Additionally, my audit trail was preserved through a personal research log which documented the process of both data collection and analysis.

Statement of Limitations

The findings gleaned from this research should be considered in light of its limitations. First, these findings cannot be generalized to represent the nature of all the reflections of teachers of literacy or even all Reading Recovery teachers. Instead of generalizing findings to another population, the intent of this qualitative research is to gain a deeper understanding of phenomena occurring within the context of the study (Lincoln & Guba, 1985; Rogoff, 2003). Additionally, efforts were made to provide thick descriptions of the setting, participants and methods so that others can reconstruct this study within their relevant contexts.

Second, this study occurred over an 8-week data collection period (with the exception of the final member check) with two Reading Recovery teachers. Lengthening
the time frame of the study and adding additional participants would have allowed for
different examinations of the nature of Reading Recovery teachers’ reflections and how
they informed their practice. Third, a related limitation is that it is possible my former
occupation as a teacher may have affected the data in unidentified ways, though attempts
were made to triangulate the data, member check, peer debrief, and to search for negative
cases as well as memoing and reflecting throughout the completion of the audit trail.
CHAPTER 4

FINDINGS

In this study I examined the nature of Reading Recovery teachers’ reflections multidimensionally and how those reflections inform their teaching practices. Participants’ reflections were noted any time they occurred (during or after a lesson, alone or with others) and across data sources (interviews, teacher artifacts, and observations). I identified three interrelated major themes connected to the nature of Reading Recovery teachers’ reflectivity and practice: (1) Reading Recovery teachers’ reflections are situated within the contextual framework of Reading Recovery and inform practices by serving as a roadmap to scaffold individualized instruction and examine personal philosophies of teaching and instructional assumptions; (2) Teacher identity as a reflective practitioner is a natural outcome for Reading Recovery teachers and fosters the interconnectedness of practice and automaticity in their reflective practices; and (3) Systematic observations of the child during instruction focus on actions of the child and themselves as a teacher and serve as a trigger for reflection in a data-driven response sequence linking theory to practice. I describe the interrelation of these themes in the form of a reflection model, as well as provide a detailed description of each theme below by outlining the properties and dimensions identified within each. As discussed in chapter three, properties represent varying characteristics of the major themes, whereas dimensions serve to provide explanatory information about each property. Furthermore, because the nature of Reading Recovery teachers’ reflections and the way those
reflections inform practices are interrelated, findings from both questions are woven together throughout the chapter. Illustrative examples from data sources are integrated to provide a comprehensive, accurate presentation of themes. Figure 9 represents a model of reflection, illustrating participants’ reflections grounded in the contextual framework of Reading Recovery influencing their own teacher-identity and data-driven practices in a three-step reflective process.

Figure 9. Reading Recovery Navigation System for Reflection
Contextual Framework of Reading Recovery: A Roadmap for Reflection and Teaching

I found the contextual framework of Reading Recovery to serve as a space within which participants reflect. The program’s emphasis on when, how, where and why (i.e., time, type, and context) teachers should reflect is taught during training, embedded in the structure of the program, and evaluated for fidelity of implementation through completed teacher artifacts, observations during ongoing professional development, and teacher leader conferences. Furthermore, this contextual framework provides the foundation upon which participants were purposeful in how, when, why, and where they directed their attention during lessons with children and the way they reflected on the child and themselves both during and after teaching. There are two properties embedded in the contextual framework of Reading Recovery in which participants’ reflections were situated: (1) the theoretical underpinnings of Reading Recovery; and (2) the structure of the Reading Recovery program (see Figure 10).

*Figure 10. Contextual Framework of Reading Recovery Binding Participants’ Reflections*
Property 1: Reading Recovery Teachers Reflect Using the Framework of Reading Recovery to Align their Decision Making with Clay’s Theory of Literacy.

As mentioned in chapter 2, a foundational premise of Reading Recovery is that the decision-making responsibility of the teacher is a constant negotiation of how to adapt Clay’s theory of literacy and their training experiences to the individual strengths and weaknesses of each child (Clay, 1991; Clay, 2005; Jones, 2000). First, the year-long training experience for Reading Recovery teachers provided the framework for how and why teachers should reflect. Second, during teaching, participants reflected on specific actions of a child and responses generated from these reflections were directly connected to Clay’s theory of literacy. Last, the consistency of lessons with children (i.e., following the same six steps everyday) leads to predictability that serves as a “roadmap” for teachers to follow during each lesson. They are familiar with when, how and why to systematically observe the child and reflect accordingly. The nature of these reflections mirrored Clay’s theory of literacy.

Training results in transformation of self, pedagogy, and how and why to reflect within Clay’s theory of literacy. During their yearlong training, teachers are instructed on how to reflect during lessons with children and how to reflect on their own teaching practices within the framework of Reading Recovery, guided by Clay’s theory of literacy. As mentioned in chapter two, Clay (1998) considered this yearlong training a period of change when teachers are challenged in their beliefs and hidden biases associated with teaching children. During this training, all teachers are required to uncover their own beliefs about the way children learn to read and write and open up to new alternatives (Clay, 1998). This requires a certain amount of buy-in from teachers resulting in shift in
the way teachers think and reflect. During my interviews with Kim and Dee, both reported a change in the way they thought about teaching children to read and write and how they used reflection as a tool to inform their practice during lessons with children.

During an interview, Kim reported,

"[Training] was an incredible, unbelievable experience and I remember going through that training and one of the teacher leaders coming out and this was probably two months into it and I did a lesson and the kid went back to the class and I just started crying. She said tell me what’s bothering you and I just said, ‘I used to think I was a good teacher, but I don’t know what I am.’ But it’s just an unbelievable experience because to me it, um, it’s almost like a Phoenix. You know? Everything you thought. Everything you thought was a good way of teaching is totally broken down and it gets clearer and you just come back up seeing unbelievable ways that you know you can teach."

Not only is Kim discussing a shift in her thinking about how to teach children during Reading Recovery lessons, but she is discussing a complete overhaul in the way she used to teach children. She discusses reflecting on the types of teaching she used to think were “good” as being completely broken down so she could now “see” new ways to teach children. Additionally, she discusses reflecting on herself as a teacher and her beliefs about teaching. She began to view herself and her teaching differently. It is during this time Kim began to see herself as a reflective practitioner, significantly, this teacher-identity is fostered by Clay’s theory of literacy instruction.

Dee discusses more specific details about the emphasis placed on reflection and learning how, when, and why to reflect.

“Oh my goodness, it’s just all about reflection. You have to…you know there are times when we say you (to the Teacher Leaders) told us, ‘When a child does such-and-such we should do x, y, and z’ and they’ll always say, ‘ah, we may have said that but it all depends on the child and the situation and the moment.’ And, it’s always about reflection. So they, we never will say, ‘Well you said…’ because it doesn’t answer all the questions to every situation, to every child. So, it’s a very big part of our training.”
Dee is expanding on the notion that it is during training they are taught to reflect on their observations of the child during a lesson instead of the activity or action plan of the lesson. Significantly, this quote illustrates a major theoretical premise of Reading Recovery, that there is no one-size-fits all approach to teaching children, but to teach them effectively they have to be keen observers and reflectors during and after lessons. This quote also reveals that participants were taught the nature of their reflections should be about what the student is doing in that moment, related to their strengths and needs, and used to inform their practice by determining next steps in the lesson or future lessons.

I continued to observe this fostering of Clay’s theory of literacy during my observation of Kim with her teacher leader and with Dee during the Continuing Contact session. Kim’s teacher leader, Sarah, prompted her to think about Clay’s theory of literacy and the guidebook they use to guide their teaching decisions. Responding to a question from Kim about what she should do next, Sarah said, “It may seem like your giving it to her, but think about what Clay said. You want to lift that piece up so they can access the visual. She calls it “taking the bugs out”. You need to show her how to anticipate. Give the child the opportunity to hear and use new structure. This way you are setting her up for success. Then, when she gets wobbly and appeals you’ve helped her on the front end and she’ll be able to check herself. The other thing was fostering her independence. You need to establish reciprocity between reading and writing. Furthermore, in the final member check with Dee she elaborated on this finding, explaining that “the training of Reading Recovery truly helped her understand what children were doing as they learned to read and what she could do to help them.”
Reflections were directly connected to Clay’s theory of literacy. As Clay (2005) contends, teachers must be able to design lessons within the framework of her theory of literacy acquisition that will vary from child to child to meet individual needs; as a result, I found the nature of my participants’ reflections to be anchored in Clay’s theory of literacy acquisition. Their teaching practices can be directly linked to Clay’s theory of literacy and how children should be taught to be independent readers and writers. As discussed in chapter two, there are four theory-based instructional tenants of Reading Recovery. Systematic observation should be used to inform teaching, reading and writing must be understood as reciprocal and interrelated, building on a child’s strengths makes learning easier, and accelerative learning is critical to a child’s success (Cox & Hopkins, 2006). Each of these theoretical tenants guides participants’ teaching practices. The nature of both participants’ reflections was purposeful, focused on the child’s actions as they relate to Clay’s theory of literacy acquisition. This was noted across cases of time (in and after lessons) and within participants running records, daily lesson record sheets and predictions of progress forms. Systematic observation of the child’s strengths and weaknesses was observed in all thirty-six observations. Reflections often focused on how to accelerate learning specifically related to these strengths and weaknesses. This focus on strengths and weaknesses guided the nature of reflection. In fact, both participants talk about how they reflect using theoretical tenants to guide their own teaching and reflective practices. Dee shared this phenomenon when discussing her own teaching and reflective practices:

There’s a section in the guidebook that talks about, um, the scale of help. It talks about the highest level of support to the, narrow, least level of support and so I’m always thinking about how much support I need to give here and I think for me that’s part of the acceleration process and
thinking about level support and changing that support throughout…
That’s always in the back of my mind as I’m teaching. So that’s helped me a lot. I’m thinking about the scale of help.

Here Dee is talking about scaffolding and attending to the child’s zone of proximal development. Importantly, while part of Clay’s theoretical model highlights the importance of scaffolding, the types of reflections made by Dee and Kim focused on their level of support and modifying that support since their practices were expected to follow that route. Additionally, each of the thirty-six daily lesson record sheets I collected illustrated this interaction between reflection on the child, activity, and themselves all focusing on actions related to Clay’s theory of literacy acquisition. Kim recorded their systematic observations of the child’s actions, errors, points of difficulty, and specific needs related to the activity. They also recorded their own actions (i.e. “TP s” for Teacher Prompted student on structure) as a result of these observations. In addition to recording these actions, they recorded their own reflections of their observations of the child’s strengths and needs. They reflected on the type of error the student made, or type of cue the student failed to use or used incorrectly. For example, during one observation Kim listened to a student read “where” for “with” and “run” for “ran” then reflected, “Visual is to confirm not to solve.” She reflected on the notion that when she observed the child making a visual check, she was not doing it to solve a word, but to confirm the original word she read. As strategic observation and reflection necessary to adapt teaching practices to direct the child’s attention to the necessary cue, Clay contends systematic observations coupled with reflection on these and themselves is instrumental in helping children develop as readers and writers.
More specifically, Kim reflected, “Sam (a pseudonym) tends to monitor on meaning and neglects structure and word endings. Reading sounds more [like] phrasing. Student is monitoring more on fluency.” She recorded these reflections on the student’s running record form which specifically asks teachers to reflect on their observations of student’s errors. Teachers are to record the “type” of error they believe the student is making: visual, syntax, or on meaning. Participants running records revealed they reflected on these various types of errors students made while reading.

Reflection provides a roadmap for teaching. According to both participants, their reflections informed their practice by serving as a “roadmap” for the lesson being taught and planning for the next day. All teachers have lesson plans; however, analysis of artifacts collected during the study illustrated these are different in that they use their reflections gleaned from the systematic observations of the child to design a highly individualized plan for the child related to her/his strengths and needs. By analyzing the daily lesson record sheets and running record forms I found the reflections recorded during a lesson to be addressed either immediately or used to plan for the following day’s lesson. This is a structural component of the Reading Recovery lesson; the individualization of each curriculum for each child is designed through the process of observation, reflection, and decision-making. Their reflections are also used to scaffold their own teaching practices when planning for the following day’s activities. During her first interview, Kim discussed this notion of reflection being a “roadmap” that informs her practice by guiding her lesson:

“So, if I don’t constantly reflect on what she just did, about what she did with the ‘run’ and the ‘ran’ and how I let her go when she did ‘the’ and ‘my’…I’ve got to think what can I do today that’s going to push her for tomorrow and make her a better reader for tomorrow. So, if I just closed
this up today, tomorrow would be a big free for all when we came and started working. I wouldn’t know where I was going…where…what do I need to attack and where do I need to go? It’s basically my roadmap. The reflection has to be my roadmap to get her so that she can be at the average of her class.”

This statement illustrates Kim’s strong philosophy about the role of reflection in her teaching practices and how she would be “lost” without it. Furthermore, I observed how reflection informed both of my participants’ teaching practices by providing them with the ability to make well-informed decisions based on data-driven observation data during lessons with children and through a review of teacher artifacts. Analysis of daily lesson records sheets illustrated how a teacher would record a reflection then record an action plan for the student. Likewise, analysis of running record forms revealed recorded reflections and an action plan generated from them. Examples of these are provided below because the nature of their reflections varied depending on when they occurred; having a direct impact in the specific way they informed their teaching practices.

Additionally, in our final member check when we discussed this visual of a roadmap, Kim laughed and explained, “That’s exactly what it is for me. It helps me know exactly where I need to go.”

Property 2: The Structure of the Reading Recovery Program Fosters Reflectivity.

There are required structural components of Reading Recovery I found to inform participants’ practices by fostering, guiding, and providing space for reflection. Systematic observations of the child during a lesson lead to the nature of automaticity of reflectivity in the “nano-second” where a record of these reflections on respective teacher artifact forms allows for “big picture” reflection on the child and themselves.

Importantly, it should be understood that “automaticity” refers to a teacher’s development
as a reflection expert. Additionally, teacher decision-making as it is typically understood is different than the “nano-second” reflections that lead to teacher decision-making. The two (i.e., nano-second and decision-making) should not be understood synonymously, but as a working unit where reflections occurring in the nano-second inform decision-making by linking theory to practice. Furthermore, my participants shared that the one-to-one ratio of teacher to child afforded unique opportunities to observe and reflect on specific strengths and needs of children to guide their decision-making and develop metacognitive thinkers with self-extending systems.

Reflecting around the clock: “nano-second reflection” versus big picture reflection. During each lesson participants systematically observed specific actions of their students and reflected on these to make decisions that followed. These reflections were “automatic” occurring in a “nanosecond” during the lesson. I observed both participants’ automaticity of reflection during lessons. Fieldnotes from observations revealed these were rapid and immediate, as I observed the teachers systematically observing students actions then instantly recording a reflection. This was observed over and over again throughout every lesson. These reflections were initially focused on a child’s actions within a given situation, and were then geared toward an action plan or next steps of the teacher. As mentioned in chapter two, an important tenant of Reading Recovery is the teacher’s ability to observe and make inferences about the child’s ability to process information while engaged in reading and writing activities (Clay, 1991; 2005; Fountas & Pinnell, 2006; Jones, 2000). Both participants discussed the importance of being reflective in the moment. Dee said,

…I think, um, one of our teacher leaders refers to it as nano-seconds (laughing). Because the nanosecond that you realize there’s something that
needs to change or you need to react to, do it. So I think (laughing), it’s not just daily, but moment-to-moment.

This quote also illustrates an ease with which teachers can multitask during instruction. Reading Recovery teachers are familiar with what to look for during lessons with a child (theory), how to look for and examine what they observe (reflection), and have organized time and space to record the reflection (structure), facilitating such automatic, “nanosecond” responses to a child during instruction. Kim shared Dee’s sentiment, saying, “So, I mean, it’s always just in the moment. In the moment, what’s going on in the moment?” Later she comes back to the importance of reflecting “in the moment” contending,

You can have a big picture of what you want but the in-the-now, in the very minute is what the child needs at that point and how can I get them to the next level of reading, next skill that they need to know, to the next strategy so that they can become a fluent reader.

I observed this automaticity of reflections during every lesson. The need for automaticity points to the structural guidelines of Reading Recovery that precision is required of immediate responses to a child during instruction in order to correct and redirect the response of the child to a “correct” path. These “nanosecond” reflections illustrate the nature of their reflections relating to a specific task or skill they observed the child using (or failing to use). Furthermore, the nature of these reflections occurred on a micro-scale, relating to a specific observation and informing a precise decision to make during the lesson to assist the child toward correcting specific mistakes. Across the thirty-six lessons I observed, both Kim and Dee consistently used an observation of a child at a point of difficulty, recorded the point of difficulty, and then reflected to plan for word work, a specific component of each lesson. Furthermore, in the first and second member checks
this process of reflecting-in-the moment was discussed and both Kim and Dee corroborated the findings.

Word work time during all thirty-six observed lessons consistently related specifically to a child’s point of difficulty encountered during the reading of a familiar book. For example, Dee observed a student struggling to read the word “made.” She recorded this on the daily lesson record sheet, writing “made, p.8, Student checked, Error on Text;” meaning when he struggled reading “made” she interpreted this mistake as an error on the text. During word work she conducted an activity where he had to slowly trace “made” to the end, putting together the word with magnetic letters. She then had him do the same with the word “make.” Afterward, she had him trace both “made” and “make” all the way to the end with his finger and “eyes” focusing on the text all the way to the end of the word, emphasizing the importance of him “following the word with his eyes all the way to the end instead of stopping at the beginning.” The reflection was triggered from systematically observing where and why he was struggling, and then deciding what to do about it. This is why Reading Recovery instructional guidelines require teachers to observe what the student is doing and use their cues to guide future practice. Without reflecting on the type of error, neither teacher would be able to scaffold word work to their students’ needs or strengths; thus, the nature of teachers’ reflections during lessons are highly specific, generated from systematic observations of the child resulting in data-driven reflections that allow a teacher to scaffold her teaching and design a precise, individualized plan to address the child’s strengths or needs.

I found reflections during the lesson additionally informed my participants’ practice by helping them plan the following day’s lesson. Thus, the automaticity of
reflections could result in an immediate action plan for the student, and also be used to plan for the following day’s lesson. For example, Kim observed a student dropping the endings of words and wrote on the daily lesson record sheet “tomorrow add ‘s’ to end of word.” She was observing and reflecting on how she could meet the child’s needs related to focusing on the structure of the word. Not only did she use her observation and reflection to plan for word work during that lesson, but to plan for tomorrow’s lesson as well.

Moreover, Reading Recovery teachers are to teach children with the goal of “change over time” in mind. In addition to reflecting in the “nanosecond” they need to be able to reflect on the child’s overall strengths and weaknesses to help grow the child’s self-extending system, the ultimate goal of Reading Recovery. To help them hone in on reflecting on a child’s “change over time” teachers complete predictions of progress forms. This progress sheet, essentially a reflection log, outlines how they should “reflect on the big picture” according to Kim. Additionally, these forms helped to guide when teachers should use reflections (now vs. later). This structure influences the nature of their reflections as well as how reflection informs teaching practices immediately versus later. This “big picture” reflection that occurs after lessons, typically twice a month, does not serve as the road map guiding each lesson, but the nature of reflections resemble a snapshot of where the child has been and where they need to go, including reflections of their own beliefs about how to help them get there. The nature of reflections recorded on these forms are general reflections of the student and a general action plan for themselves. For example, Kim reflected about one student, “Tends to monitor on meaning and neglect structure and word endings. Reading sounded better and student is
monitoring more on fluency.” On this same predictions of Progress form Kim also reflected on an action plan for herself:

Encourage child to read familiar text quickly-use masking cards, demonstrate phrasing, expand meager knowledge of words using magnetic letters left to right, write word in big print, say word slowly as child traces with finger, ask child to write words several times, stop child at a particular word that would be helpful to add to writing vocabulary.

Additionally, Dee discusses going back into her daily lesson record forms over several weeks to reflect on her practice when a child was failing to move past a specific book level. Instead of using the predictions of progress form, she reflected on her recorded actions during lessons to examine her own teaching practices. Expanding on this during an interview she said, “Sometimes I'll look at my notes later and think, 'Aha' I've been prompting this for a week and I've seen no change. Do I need to give more or less?” This type of reflection informed Dee’s own practice by helping her evaluate her own teaching practices and next steps to help a child become successful. These teacher artifacts serve as a space for teachers to reflect in and on action; however, they also provide a space for teachers to reflect over time on their own teaching practices.

Essentially, this “big picture” reflection is an overall snapshot, while “in-the-moment” reflection is the detailed roadmap identifying specific next steps during the lesson. All of these reflections occur within the structural framework of Reading Recovery.

The one-on-one ratio of teacher to child creates more opportunities for, and greater examination within, reflection of a child and the teacher. Participants claimed the one-to-one ratio of teacher and child is a program structure that fosters reflectivity due to the micro-lens the teacher is able to use during lessons and when planning. Dee shared that before she became a Reading Recovery teacher she “yearned” to be as
reflective as she is now. She explained lacking the guidance, experience, or knowledge of how to do it and she didn’t know how to help so many children who were struggling in her class. Yet, within Reading Recovery, Dee feels she has the guidance, experience and knowledge of how to reflect in a way to help her students. Addressing the issue of multiple children in a classroom, like Dee, Kim shared that if she were to return to the classroom it would be

a different ballgame. You can apply some of the strategies that you use (in Reading Recovery)...but you couldn’t reflect the same way. How stressful would it be to teach every individual...and that would be your...think...gosh, I’ve got to get this for this student and this for this student and you’ve got to have all these roadmaps for all these students. There’s just no way. There’s just too many children; although it may help the students who are the most needy. You could...even then, could I do it with them? I don’t think so because you’re still working with a small group. You could find time here and there to work with them individually, but could you do it every day? Probably not.

Importantly, Kim discusses the inability to create a roadmap for every child in her class. Both feel the predictable daily lesson structure and one-to-one ratio of teacher to child allows them to reflect the way they do, which is significant since both view reflection as the navigation system within which they teach children.

In sum, I found my participants’ reflections to be situated within two major components of the contextual framework of Reading Recovery: (a) the theoretical underpinnings and (b) the structural guidelines. Clay’s theory of literacy provides the foundation for how and why teachers should engage in reflective practices to guide and examine their own teaching, while the structural guidelines of Reading Recovery frame when and where reflections should occur. During the training program teachers learn when, how, why, and where to reflect. In the field, reflection acts as a roadmap, aiding in the decision-making process immediately, after lessons, and over time. The one-to-one
instructional framework, consistency of program components, and required forms with reserved space for reflections also fostered the reflective practices of participants resulting in reflections that occurred on a micro-scale, informing their practice by providing (1) a roadmap for their next steps with a specific child and (2) a self-identity as a reflective practitioner that values, and needs, opportunities to reflect on themselves and their practice. The following section highlights the reflective practitioner identity both participants’ shared resulting in a valued perception of reflection from which they could not “separate” themselves. In addition, opportunities to reflect with colleagues fostered this teacher-identity as a reflective practitioner.

Reading Recovery Teacher = Reflective Practitioner

Participants identified themselves as reflective practitioners who could not “separate” from reflection. Explaining that reflection is just “what they do,” both discussed an ever-present nature of reflection. Additionally, I found collaborative reflection, valued greatly by both participants, played a critical role in their self-proclaimed identity as reflective practitioners. Though opportunities to collaboratively reflect with others varied significantly between the two participants, both emerged as reflective practitioners when reflecting with others in spontaneous, unstructured settings or formal professional development opportunities. I found these unstructured, spontaneous collaborative reflection opportunities to sometimes resemble “eaves dropping”; however, this chance to listen to other colleagues teach became a great tool for reflection. Additionally, collaborative reflection became an opportunity to receive feedback on teaching practices, share frustrations, and as a result both felt these opportunities helped them grow as reflective practitioners. I describe specifically how
Kim and Dee identify themselves as reflective practitioners as well as outlining some of the collaborative reflection opportunities participants shared that “help them grow” in their own teaching practices.

Property 1. **Teacher identity as a reflective practitioner** is a natural outcome for Reading Recovery teachers and fosters the interconnectedness of practice and automaticity in their reflective practices. It became clear during my discussions with both Kim and Dee that they identified themselves as reflective practitioners. For both of them, reflection was not something they could separate themselves from. As reflection was fostered throughout training and through the teaching artifacts they are required to fill out during lessons, I found this to produce automaticity in their reflective practices during their lessons with a child.

*Cannot separate self from reflection.* Both Kim and Dee discussed the notion that they cannot separate themselves from reflection. During interviews, I asked them to share what I should know about each of them as I think about their reflections. Dee replied

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**Figure 11. Teacher Identity as Reflective Practitioner.**
“become an ingrained part of what I do and how I teach... so it's a very big part of everything that I do and I don't think I can step away from it now because I've been doing it for so long and I can't separate reflection from teaching, assessment, all that.”

Additionally, during Kim’s interview she discussed how she could “never” reflect the way she does now if she were in a regular classroom setting.

There’s just no way. There’s just too many children; although it may help the students who are the most needy. You could...even then, could I do it with them? I don’t think so because you’re still working with a small group. You could find time here and there to work with them individually, but could you do it every day? Probably not.

During my final member check with Kim she told me she was leaving Reading Recovery to go back into a regular classroom setting teaching first grade. Without prompting, Kim shared she was “terrified about how [she] was going to be able to individualize her teaching the way she does now.” Furthermore, she was “already worried about how [she] was going to meet all the needs of her students.” This illustrates a fear associated with teaching without being able to reflect on systematic observations of each child in a one-to-one setting. Additionally, it shows how she sees reflection as a part of her identity that she does not want to give up. She’s trying to figure out how to keep this part of her identity and still meet the demands of teaching in a traditional classroom setting. Without the contextual framework of Reading Recovery, Kim is “terrified” what will happen to her ability to capitalize on children’s strengths and meet their needs. She will have to re-envision the way she identifies herself as a reflective practitioner. Furthermore, Dee describes her desire to learn more about reflection and how to use it to meet the needs of all of her students when she was a regular classroom teacher; however, she says “it wasn’t until I became a Reading Recovery teacher that I was able to successfully engage in this reflective practice or identify myself as a reflective practitioner.” This is
significant because participants did not see themselves being as reflective when they were in regular classrooms and have therefore situated their identities in the context of Reading Recovery. To take this identity and apply it in a different context is concerning to Kim.

*Constant nature of reflection fostered during Reading Recovery lessons.* Because it is something they “constantly” do and have done for so long, both Kim and Dee said they could not stop reflecting if they tried. Though they talk about not being able to stop reflecting if they tried, as noted above, Kim is worried that she will not be able to reflect in the same capacity she does now. Kim talks in-depth about how she “constantly” reflects so she knows what to do next. Seemingly, reflection is so much a part of her that without it, she would not know what to do next with a child.

> “I mean, if I don’t see something today and notice something about what that reader is doing today, I’m not going to be able to push them tomorrow…if I don’t constantly reflect on what she just did…I’ve got to think what can I do today that’s going to push her along for tomorrow and make her a better reader for tomorrow?”

Dee is in school getting her specialist degree and noted that professors have commented on her ability to reflect, explaining

> “I didn’t think it was a big deal because it’s just what I do. Over the years I think I’ve grown so that, um, it’s something that now it’s something that I don’t even think about not doing. That’s when I realized that this has become part of how I teach and who I am as a professional.”

To separate their teaching, observing, and assessing from reflection was difficult for both participants because they contend reflection is woven through everything they do. This engrained nature of reflection was illustrated throughout the analysis of all teacher artifacts as well. Recorded reflections were observed on every teacher artifact collected. These reflections were used to scaffold their instruction for the child to more adequately and individually meet the child’s strengths and needs. When I discussed this constant
nature of reflection emerging at their four-week member check both participants agreed
in its validity. Dee shared again, “reflection is something that has become such a part of
myself as a teacher that I am constantly reflecting.” In addition to valuing their own
individual reflective practices, both participants believed collaboratively reflecting with
peers has many positive outcomes.

Property 2. Contributing to the teacher-identity of reflective practitioner, collaborative
reflection occurs with Reading Recovery colleagues in two forms (1) unstructured and
spontaneous and (2) structured in the form of Professional Development.

Throughout the duration of my research, I was only able to observe Dee reflecting
with Reading Recovery colleagues. As mentioned in chapter three, Kim teaches in a
school where she is the only Reading Recovery teacher. I did not observe Kim reflecting
with any colleagues at the school; however, she did request a Teacher Leader visit to
discuss the progress of a student where I observed her collaboratively reflecting. During
interviews with both, I probed about reflecting with others and Dee discussed how
influential instances of unstructured and spontaneous reflection have been “tremendous”
in helping her become a better teacher. Kim, on the other hand, discussed the desire to
reflect with other Reading Recovery teachers. All of these instances of collaborative
reflection are delineated below.

Eaves dropping. Instead of the typical setting of collaborative reflection where
colleagues sit and reflect on a student or their practices together, Dee discusses how
listening to other teachers teach prompts reflection on her own teaching. When asked to
talk about the opportunity to have peers to reflect with Dee shared,

“Oh, definitely, that’s a big, big part of what we do. We always talk about
just listening to each other. Laura (pseudonym) is here in the middle.
She’s on maternity leave now, but she has such a way of…just listening to her teach and her language is just a little bit different than mine so she may prompt for something that I may not have prompted in the same way. And if I hear it I think…hmmm, I’ve never thought to prompt in that way. So, that has been tremendous. She’s always very calm and level, but she never loses her focus. And so, just listening to her has been a tremendous, tremendous amount of help for me and I think others can say the same thing. We all support each other in that way. Just listening to other people teach and just keeping that language crisp. Because a big part of Reading Recovery is the prompts and making sure you don’t go on and on and on and on. You make your case, you go to where you need to and then you move on. That has helped me also, Laura is so awesome about that. She’s like here’s what you did, here’s what you can do next time, and then she’s off and running. So we keep each other in check. So, that’s awesome.”

This illustrates an important feature of the nature of reflection that evolves from simply listening to another teach and reflecting on her own practice. In our final member check, Dee reverberated this sentiment saying, “Reflecting in this manner also helps to inform her practice by providing new prompts for students, keeping her language crisp” and helping keep her in check with her teaching.”

*Cannot be reflective without feedback from peers.* For Dee, in a school where she has Reading Recovery colleagues, getting feedback from them on her teaching and about students is part of how she is reflective. According to Dee, “being reflective happens when I am constantly getting feedback from my co-workers. A lot of it is constantly getting feedback from my co-workers.” Getting feedback helps to illuminate her actions that may have been taken for granted. Reflecting with her peers serves in “helping [her] realize what [she] was doing.” Thus, without feedback from others about her own teaching practices, she would not be able to reflect on actions in the same way. I also observed this “reaching out” to colleagues for help with a child when Kim requested a meeting with her teacher leader. During the meeting I observed Kim repeatedly ask for the teacher leader’s input, advice, and help as she reflected on her own practices and the
child’s needs. Some examples of these questions were: “Well, even in reading when she comes to ‘come’ she stopped. We’ve been doing this for 12 weeks. What’s getting in the way?; Should I do this before a familiar reading and set it up for her then?; What should I do next?” Likewise, Dee shared one occasion when peers gave her feedback that changed the way she worked with a child:

“What I was doing for that, I was starting with…gosh, what did they say? I was starting with the most amount of support and when you start with the most there’s nowhere to go. So…And that was one of the things they noted with some of my teaching. And they suggested that I start with the least and then give more if needed and giving him more opportunities to take risks and do more.”

Again, Dee talks about the power of having peers listen to each other and the benefits of sharing frustrations about students. For Dee, being able to share frustrations with her Reading Recovery colleagues helps her be more reflective. She said,

Sometimes if I'm frustrated I'll go to Laura or I'll go to the other trailers and I'll say, 'Uggg’ and they listen and they talk about their own kids and it helps me reflect also. And again, there are times when you are so frustrated because every child is so different and you don’t know where to go next…sometimes just articulating it to someone else helps you.

This notion of “clearing your mind” resonates because they are able to talk through their frustrations to gain some sense of clarity. Simply sharing aids in a reflective process. For example, Dee said, “sometimes just articulating it to someone else helps you. They don’t necessarily have to give you an answer and I find that a lot of times that helps me as well. Or, they’ll just bounce off ideas. Well, my child does this and I’ve done that and my child does this and I’ve done that. They’re tremendously helpful. Tremendously helpful.”

Observing and listening to each other teaching is a valuable resource to Dee. When others might baulk at having to share a classroom with two other teachers, Dee has found that watching and listening to them and reflecting with her colleagues have been
instrumental in helping her grow. She shared, “And I watch other people. We’ve had several other teachers on this team in the last four or five years who’ve been in training and we talk and we discuss and they help me grow.” In our final member check Dee again corroborated this finding, sharing the importance of having others to listen to and reflect with: “It really is all about reflection. Listening to, and reflecting with my colleagues here has helped to make me the teacher I am today.”

When me, myself, and I reflect together. On the other hand, Kim (in a school without any other Reading Recovery teachers) repeatedly expressed a strong desire to have other Reading Recovery peers to reflect with during interviews. When asked about opportunities to reflect with others she laughed and said, “Here, it’s just me, myself, and I, and we always agree.” During our final member check, Kim expanded on this desire to have other Reading Recovery teachers to reflect with. She said she “wished everyone could become trained in Reading Recovery so we could all talk and reflect together about our students and what we are doing.” Kim did not express the desire to reflect with other colleagues in the school, though she served on many committees in the school, the value in reflecting with others came from reflecting with other Reading Recovery teachers. Kim did however request a teacher leader to observe her working with a child so she could reflect with someone else about the child’s progress. This “contact session” resulted in a structured opportunity for reflection that is considered one type of Professional Development within Reading Recovery. Contact sessions and the nature of reflections that occur during them are discussed below.

Contact sessions are reflective sessions. When Kim requested Lisa (pseudonym), a Reading Recovery Teacher Leader, come observe a lesson she was having with a child
who was not progressing as she should, Lisa explained the purpose of these contact sessions is to “meet and reflect together.” “These meetings are supposed to be collaborative. I'm here to listen to and support the teacher. Kim has already sent me a write-up discussing issues, concerns and what she'd like to get from this.” The teacher leader played the role of scaffolding the Reading Recovery teachers’ reflections. Lisa prompted Kim to reflect on her actions. Using questions like,

“Why did you pick that specific level seven? So you chose it because of her confusion with these words? So what do you want to focus on shifting? So when she's reading, do you think she's anticipating? Do you think her reading is meaning driven? So do you think she is dropping visual cues at point of difficulty? Does she know how to confirm for herself? As I hear you talk about these words I wonder how much of her struggling has to do with structure?”

These questions resulted in new ways of thinking on Kim’s part. For example, when Lisa asked Kim if the student understood when she prompted “Does she understand what that means? I mean, when you say, does it sound right and look right, does she know what you are talking about?” Kim paused, and then replied, “No, maybe not. I don't know. I haven't thought about that. Yeah. I don't know. That's good. That makes so much sense. Now I see it after you say it!” This meeting also gave Kim a chance to ask questions about her reflections as well: “After all this time she's still stopping. What's getting in the way? What is she using and what do I need to support her?” To these questions, the teacher leader would often reply with another probing question, scaffolding Kim’s own reflections. The following is a brief script of the conversation:

Lisa: Well what else are you seeing? What do you think is getting in the way?

Kim: More meaning. Should I do this before a familiar reading and set it up for her then?
This type of exchange went back and forth throughout the meeting. Kim shared frustrations or concerns, Lisa scaffolded her reflections by asking more questions. Additionally, Lisa tied many of Kim’s teaching practices back to Marie Clay’s theory of literacy to provide support for Kim. In one instance she said:

“You're doing something Clay talks about. What is it she says? You keep working until all ingenuity runs out. That's what you're doing. Yes. It may seem like you're giving it to her, but think about what Clay said. You want to lift that piece up so they can access the visual. She calls it 'taking the bugs out'. You need to show her how to anticipate. Give the child the opportunity to hear and use new structure. This way you are setting her up for success. Then, when she gets wobbly and appeals you've helped her on the front end and she'll be able to check herself.”

The contact session resulted in a desire from Kim to change her teaching practices with this child: “Yes. I need to change something. I need to shift and find a way to make her less dependent on me and she needs to know that she's right and how to move on without my prompting.” Likewise, there was a reciprocal power of reflection during this meeting. The teacher leader also discussed how the conversation between the two had made her reflect on her own practices:

“This has been great because it's helped me to think about my own kids. I have two in ESOL and I haven't been thinking about structure. You know, it's book language and that doesn't make sense to them when they are learning our spoken language. We need to help tune their ear and tune our own...support that.”

This structured opportunity to reflect with a teacher leader afforded Kim the opportunity to do what Dee does spontaneously with her Reading Recovery colleagues. Both were able to share experiences and frustrations, explaining that these opportunities resulted in new ways of thinking about the way they work with children.

I found that, for participants, viewing themselves as reflective practitioners plays an important role in their systematically observing a child during lessons. Because
participants could not separate themselves from reflection, their observations of child
became opportunities to glean data-driven information about the child’s action that
triggered reflection which informed their practice by allowing them to individually
respond to the child’s strengths and weaknesses (see Figure 12).

Systematic Observations of Child: Data-Driven Nature of Reflections

As previously discussed, I found the nature of my participants’ reflections to be
bound by the contextual framework of Reading Recovery. Additionally, I found these
reflections to be triggered by data gleaned during systematic observations of a child
during a lesson. These data-driven reflections are guided by systematic observation of the
child resulting in a three-step reflection process focusing on responsiveness to the child’s

Figure 12. Data-driven Nature of Reflections Informing Teachers’ Practices.

As previously discussed, I found the nature of my participants’ reflections to be
bound by the contextual framework of Reading Recovery. Additionally, I found these
reflections to be triggered by data gleaned during systematic observations of a child
during a lesson. These data-driven reflections are guided by systematic observation of the
child resulting in a three-step reflection process focusing on responsiveness to the child’s
strengths and weaknesses, always accounting for the ultimate goal of developing a self-extending system in the child.

Property 1: **Systematic observation** of a child during a lesson results in the data-driven nature of Reading Recovery teachers’ reflections.

Reading Recovery is specific about the child-watching habits of its teachers. Their observations should be focused on recognizing what the child is doing moment-to-moment, the cues she/he is using, and the needs related to improving their self-extending system (Jones, 2002). I found the nature of participants’ reflections to be about their observations of the child succeeding or struggling with a reading strategic activity or cueing system (i.e., visual check, syntax, structure, or meaning check). On the thirty-six running record forms Dee completed she reflected on the errors and self-corrections of the student, recording what type(s) of information she/he was using or neglected to use at her/his point of difficulty. The point of difficulty is a phrase commonly used in Reading Recovery to represent a variety of actions by the child. Some examples representing a point of difficulty are: child pauses at an unknown word, child replaces a word for an unknown word without noticing, child skips a word, and child misreads a word. For example, Dee recorded a child reading “had” for “heard” and reflected that the error was a visual mistake. In the same lesson the child read “tooked” for “tickled” and then corrected herself. When she made the mistake Dee thought this was a visual mistake. When she self-corrected, Dee reflected that the child used both a “meaning-“and “structure-check” to correct herself.

Furthermore, I found the nature of participants’ reflections to be about the child and situated within the activity occurring. Upon analysis of the teacher artifacts, I found
that both Kim and Dee’s reflections recorded during lessons illustrated an interaction
between the “who” and the “what.” Neither participant ever reflected solely on the child
or the situation without taking the other into account during the lesson. Thus, both
participants regularly reflected on the child’s response to reading and writing activities as
they related to specific aspects of the lesson. In running records and daily lesson record
sheets, Kim and Dee both recorded observations of the child during the lesson followed
by a brief reflection of what they believed the child was doing and what they need to do
to meet the child’s needs. On one occasion Kim observed a child read “had” for “have.”
She noted the mistake and when the child was finished reading the book she took her
back to this part and had her cover the word with her fingers, moving them slowly across
the word. The child read “have” successfully. Kim then prompted her to “follow the word
all the way to the end.” Additionally, in each of the sixteen observations of Dee she
recorded her observation of a child at a point of difficulty. After recording this
observation (e.g., “Student replaced “come” for “can”) she reflected on the next step she
should take to support the child within the lesson. In this specific case, she followed the
written observations with the comment: “Prompt for Meaning” which she did in the new
book at the end of the day, asking questions like, “Did that make sense?” “What is the
bear looking for?” “Why is baby bear sad?” In the next day’s lesson she also prompted
for meaning throughout the familiar book, checking to make sure the student was reading
for meaning.

When asked about these systematic observations of the child related to the
activity, Kim replied,

“Well, because it [my observation and reflection on the observation]
guides the lesson for the next day. I mean, if I don’t see something today
and notice something about what that reader is doing today, I’m not going to be able to push them on it tomorrow. So, if I don’t constantly reflect on what she just did, about what she did with the ‘run’ and the ‘ran’ and how I let her go when she did ‘the’ and ‘my’…I’ve got to think what can I do today that’s going to push her along for tomorrow and make her a better reader for tomorrow.”

This sentiment further reverberates the notion that the systematic observations result in a data-driven nature of their reflections resulting in reflection informing their practice by decisions made regarding scaffolding their own instruction to the ZPD of the child.

Property 2: The nature of Reading Recovery teachers’ reflections are highly individualized, resulting in an acute responsiveness to child’s strengths and weaknesses.

As mentioned in chapter two, a component of Reading Recovery is the individualization of lessons during the one-on-one interaction between teacher and child. The success of the Reading Recovery teacher depends on her tentativeness and reflective practice with regard to each child, recognizing her/his specific strengths and weaknesses (Clay, 2005). I found this sentiment exemplified in my participants’ reflections as well.

Upon analysis of all data sources, neither of my participants ever compared a student to another child or talked about their experiences with another child (or children) while reflecting on or planning for a specific child. In fact, both mentioned how different and unique planning and observing each child has to be. Kim mentioned that,

“It’s so interesting because you could ask me the same question about another student and it could be a completely different answer because it’s so individualized. In this particular student I’m looking for areas where she’s being dependent, where she’s go those sight words correct, where she’s getting those predictions of progress. But for another student it might be a different thing, but constantly, constantly thinking, what was the prediction? What is the big picture that the child needs? And, what is it right now that the child is doing?”
Additionally, all the forms Reading Recovery teachers fill out during and after lessons are individualized and focus a teachers’ attention to that specific child’s actions, strengths, and needs. Being that their lessons are one-on-one and they are required to plan for each child individually, this is not surprising. Interestingly though was the notion of this individualization and responsiveness evolving with experience and over time. Dee spoke repeatedly about how highly individualized her reflections are toward her students, but how it was a process to get there:

“So, I think that part has taken me a long time to grow into (reflecting on the child) because as a classroom teacher for eight years it was what I planned not what the child did (emphasis added is Dee’s). So making that big shift of following the child is something that takes time.”

It should be noted that both participants regularly reflected during every observation to make teaching decisions during that lesson, particularly related to word work. In all 36 observations I conducted, the word work portion of lessons was directly linked to a point of difficulty a child experienced while reading. Though this point of difficulty was usually also a noted need of the child, both participants repeatedly used a point of difficulty as a trigger for reflection and then decision-making to scaffold a child’s use of reading strategies. Kim observed a child at a point of difficulty reading “goes,” “gets,” and “a” for “go.” In the same reading she read “going” for “good.” She noted these on the daily lesson record sheet. Then, during the word work time she wrote “go” on the table with a dry erase marker and asked the child to read the word. The child could successfully. She then added –ing and prompted her to read the word. The child read “going.” She added –es to “go” and had her read “goes,” which the child did successfully. She then added –ing to “look” and “play,” having her reading those words as well. She ended the word work session with a conversation about having to “say the whole word,
not just the beginning” and making sure to “follow the whole word with your eyes all the way to the end.” After the activity Kim also wrote “tomorrow add –s to end of word.” In the following day’s lesson Kim made sure to include words that ended with “s” in the child’s writing. She pointed out how important it was to include all of the letters in the word because words mean different things when they have different letters.

Dee recorded instances similar to this during lessons with her child. For example, during the reading of a familiar text she observed the student reading “he” for “with,” “we” for “he,” “made” for “make,” and “sit” for “sat”. The following is a script of Dee during word work.

Dee: Okay, come over here.

Dee: I’m going to make a word and you’re going to have to decide if I’m making ‘made’ or ‘make.’ It’s your job to decide if I’m making ‘made’ or ‘make.’

Dee writes ‘made’ with magnetic letters.

Child: Made

Dee: Check it.

Child follows with finger and repeats ‘made’.

Dee spells ‘make’

Child: Make

Dee: Break it for me.

Child breaks ma-ke.

Dee: I’m going to do another word you know.

Dee writes “will” on the board.

Child: Will
Dee: Watch me break it. Wiiiilllll (using her finger underneath the word).

Dee: Now you break ti.

Child moves the magnetic letters “wi” “ll” apart.

Dee writes “with” on the board using magnetic letters.

Dee: Can you break it?

Child breaks “wi” “th”

Dee: What parts stay the same?

Child: “th”

Dee: Good. It’s important for you to check all the way to the end of the word.

Okay? That’s your job.

Dee and the child move back to their seats.

These two word work activities reflect examples of every lesson where both participants’ systematic observations of a child’s point of difficulty served as a trigger to reflect on what skills the child was using (or neglecting to use), resulting in an action plan for the word work portion of the lesson.

*Property 3: Reading Recovery teachers often reflect in a three-step patterned process: (1) What is the child doing?; (2) What does the child need?; and (3) What can I do to get the child where she/he needs to be?.

I found the nature of both of my participants’ reflections to be focused on the child first, themselves second. They always reflected on their observations of the child and how the child’s actions related to their respective strengths and needs. Then they would reflect (either immediately or after a lesson) on themselves either informing their teaching practices by resulting in an immediate teaching decision or action plan, to plan
for the following day’s lesson, or to reflect on how to develop a self-extending system for the child (the ultimate goal of Reading Recovery). In every case though, the child always came first. These reflections on the child were data-driven from systematic observations during lessons. Both participants shared this same pattern of reflecting during interviews. They discussed reflecting on several things in the same order: (1) What is the child doing?; (2) What does the child need?; And (3) What do I need to do to get the child where she/he needs to be? When asked how reflection informs her practice Kim discussed this three step process guiding her teaching, “So, I mean, it’s always just in the moment. In the moment, what’s going on in the moment? What is the child doing and what can I do to help the child move further in their reading skills?” Dee also discussed the importance of attending or “following” the child, “observing what needs to change” and then reflecting on “how you need to react.” This pattern of reflection was evidenced in my observations and their teacher artifacts as well. They always recorded their systematic observations of what the child was doing first (i.e., points with finger at point of difficulty). Then they reflect on this observation (i.e., the finger is distracting him from using his eyes to break the word). Lastly, they reflect on their own practice to decide on an action plan (i.e., “Uh-oh, I see someone’s finger in there. Do you need your finger to help you right now?). This pattern occurs during lessons, when planning for lessons, and when completing “big picture” teacher artifacts. Even the way the predictions of progress form is written it requires teachers to reflect on what they are observing the child’s strengths are, their needs, and then the teachers’ action plan related to those. The child’s actions are reflected upon, the child’s needs are reflected upon, and finally, the teacher reflects on an action plan for the child to meet these needs.
Property 4: Reading Recovery teachers purposefully **model reflective practices** to students to **help them become metacognitive of their own actions related to their developing reading and writing practices.**

As previously mentioned, I found participants self-identify themselves as reflective practitioners, as well as use reflection to guide their teaching on a daily basis. I also found that as children progress through Reading Recovery, participants prompted their students to be reflective of their own strategies and actions. This type of questioning was only observed at the end of data collection, when the students had made enough progress through the program. Both Dee and Kim prompted students to be metacognitive of their own actions, a task they had been scaffolding since the child entered Reading Recovery. For example, at the end of reading the familiar text, instead of summarizing the skills the student did well, Dee asked him what he thought of his reading. He replied, “Good” and she went on to give more detail. However, as the lesson progressed, she continued to have him reflect on his actions and he began specifically reflecting on the strategies he was using. The following is an example of Dee prompting a child to be metacognitive of his own reading skills:

Dee: You did awesome! Can you show me where there was a tricky part and you helped yourself?

Child: Right here (pointing to a page in the book). No, go back (flips pages and then points).

Dee: Where?

Child: Here I said top, top, top, then I fixed it (he was saying “top” for “tree”)


Dee. You did so many good things. What did you do here? Pointing to the word “squirrels” (he paused at this word in the earlier reading and sounded it out slowly).

Child: Squirrels next

Dee: Good. You started with the word and then you checked it all the way through to make sure you were right.

Child: But there’s no ‘so on squirrel (pointing out that he shouldn’t have added ‘s’ to the end).

Dee: Ah! You are so smart! You’re paying attention…

Similarly, Kim began asking open-ended questions, prompting the child to reflect on her actions instead of telling her what she was noticing about her reading. The following are some of those prompts: “What’s confusing you? Show me? Why is this confusing you? What’s going to happen? What would make sense? How can you help yourself?” The notion of passing the support from teacher to student having to help her/himself was done in the form of having the child reflect on her/his understanding of reading and writing skills. In a different lesson, Dee prompted a child the same way.

Dee: Great reading. Is there a place that was tripping you that you worked out all by yourself?

Child: All of them (laughing).

Dee laughs also.

Child: This one (pointing to a word on the page he struggled to read).

Dee: What did you do to help yourself?

Child: I went back and used my finger.
Dee: You did and you broke it with your hand and your eyes!

Both of my participants challenged their children to become metacognitive about the literacy strategies they used. I found this strategy of “passing the reflecting baton” by prompting the students to reflect on their practice to be a part of developing their self-extending system.

Summary

In sum, I found the contextual framework of Reading Recovery to provide the structure within which: (1) teachers reflect; (2) teachers view themselves as reflective practitioners; and (3) systematic observations of children occur resulting in data-driven reflections that guide practice. The nature of these reflections were directly connected to Clay’s theory of literacy and guided by the program guidelines. In turn, the contextual framework provided the structures that fostered the theory-driven nature of reflections to inform practice by serving as a roadmap to scaffold individualized instruction and examine personal teaching practices. Furthermore, this reflective process and identity were fostered during training, as teachers were taught where, when, what, why, and how to reflect during lessons with a child. This identity continued to be fostered in the form of professional development opportunities with teacher leaders and, for Dee, in less formal settings with Reading Recovery colleagues. Opportunities to reflect with colleagues were highly valued, and sought after as a way to receive feedback and think about their teaching. Teacher identity as reflective practitioner was found to be a natural outcome for Reading Recovery teachers; to such an extent teachers could not separate themselves from their constant nature of reflections during lessons with children. This constant nature of reflection fostered both their identity as a reflective practitioner and
automaticity in their reflective practices. Systematic observations of the child during instruction focus on actions of the child and themselves as a teacher and served as a trigger for reflection in a data-driven response sequence. This three-step reflective process resulted in a highly individualized action plan for the student with the teacher being acutely aware of her/his needs. As children progressed in their own reading development teachers passed on their reflective practice to the child as reflection began informing the students reading practices in the form of metacognitive thinking. I discuss implications and suggestions for future research related to these findings in the following chapter.
CHAPTER 5
DISCUSSION

The purpose of this study was three-fold: (1) to examine the historical underpinnings of reflection, bound by time, type and context, and its influence on current applications of teacher reflection; (2) to understand the nature of Reading Recovery teachers’ reflections multidimensionally; and (3) to examine how the reflections of Reading Recovery teachers informed their teaching practices. Participants included two Reading Recovery teachers from the largest school district in a southeastern state. This work was motivated by the lack of research on reflection accounting for the time, type, and context within which it occurs. Additionally, researchers have indicated reflection is a necessary act in the decision-making process of teaching, but little is understood about the nature of reading teachers’ reflections (examined multidimensionally) and how those reflections inform their teaching practices (Dewey, 1933; Gore & Zeichner, 1991; Hatton & Smith, 1995; Larrivee, 2008; Valli, 1997; Van Manen, 1995; Zeichner & Liston, 1996). Though many researchers have conducted research on reflection by examining one or two dimensions of teacher reflection, this study was unique in that it accounted for the three dimensions (time, type, and context) of reflection as I examined the nature of Reading Recovery teachers’ reflections and the way those reflections informed their teaching practices. I identified three interrelated major themes connected to the nature of Reading Recovery teachers’ reflections and the way those reflections informed their teaching practices: (1) Reading Recovery teachers’ reflections are situated within the
contextual framework of Reading Recovery and inform practices by serving as a roadmap
to scaffold individualized instruction and examine personal teaching practices; (2)
Teacher identity as a reflective practitioner is a natural outcome for Reading Recovery
teachers and fosters the interconnectedness of practice and automaticity in their reflective
practices; and (3) Systematic observations of the child during instruction focus on actions
of the child and themselves as a teacher and serve as a trigger for reflection in a data-
driven response sequence. These findings address guiding research questions and provide
insight into how reflective practices of teachers of reading may be fostered through
teacher education and into their own teacher development.

Contextual Considerations

Just as Larrivee (2000) found teachers had to remain fluid in their decision
making by reflecting on and modifying skills to fit specific contexts, the contextual
framework within which any teacher reflects plays a role in her/his decision-making.
Importantly, for Kim and Dee, the context of Reading Recovery provided and required a
space for reflection that invariably informed their teaching practices in the form of a
roadmap to guide their in-the-moment teaching decisions and planning. Unlike most
teacher preparation programs, through the Reading Recovery training Dee and Kim
learned when, where, why, and how to reflect on their practice. Thus, for both of them, it
appears reflection became as much a part of teaching the child as instruction. Within the
context of Reading Recovery reflection becomes a purposeful, cognitive act rooted in
Clay’s theory of reading and reading acquisition. What is unique about this theory-driven
nature of reflection is that Kim and Dee are aware and purposeful of their use of Clay’s
theory to reflect on their observations. Researchers have often cited the need for teachers
to bridge the gap between the decisions they make in the classroom and theories of learning (Duffy, 2002; Morrow, Tracey, Woo, Pressley, 1998; Rodgers, 2004) and I found that both Kim and Dee connected the two on a regular basis through reflection. Kim and Dee were purposeful in reflecting on the cueing systems a child used to navigate a text. Both were purposeful in reflecting on their own teaching practices by using activities and prompts Clay’s theory of reading acquisition support. While the nature of these reflections are theory-driven and purposeful, they are indeed required components of teachers’ reflective practices as well. The reflection both Kim and Dee engaged in became a part of who they were as teachers because they were taught what, why, how, when, and where to reflect and how to link theory through reflection to practice. Being a Reading Recovery teacher requires a sense of orthodoxy related to the practices and theoretical framework of the program resulting in a self-identity of reflective practitioner.

Teacher Identity

Further motivating the study was the finding that both Kim and Dee identified themselves as reflective practitioners. As previously mentioned, researchers have touted the importance of teachers who are self-reflective (Duffy, 2002; Larrivee, 2008; Mazzoni & Gambrell, 2003; Roskos, Vukelich, & Risko, 2001; Smyth, 1992; Zeichner & Liston, 1996). Researchers contend the more self-reflective the teacher the better able to attend to the strengths and needs of the child by drawing from many different teaching methods and strategies (Clay, 2005; Duffy, 2002). What is interesting about the reflective practitioner view of my participants is that they appear to be Reading Recovery reflective practitioners, not teachers who are reflective practitioners. When talking about their self-identity of a reflective practitioner it was only in the context of Reading Recovery.
Whether this identification came as a result of their constant reflection during lessons or vice versa, this self-identity lead to self-efficacy within their own teaching practices to tailor their teaching to the strengths and needs of their students. And though much is written about the need for reflection in Reading Recovery (Cazden, 1988; Clay, 1993a; 2005; Jones, 2000) the effects of a reflective teacher identity as a Reading Recovery teacher have not been examined.

For Kim, being a reflective Reading Recovery teacher is just “who I am.” Because of the contextual framework from which they operate, the identity of a reflective practitioner is fostered and continues to develop to a point both participants agreed it had become an ingrained part of who they were, what they do, and how they do it. This is important because neither Kim nor Dee saw themselves as being reflective when they were teachers of reading in a typical classroom setting; in fact, Dee talked in detail about “yearning” for the opportunities to learn how to reflect. Just as their reflections on children were situated within the context of Reading Recovery, so was their reflective practitioner image of themselves. They were reflective to the extent Reading Recovery expected them to be. This is significant, as some researchers have found that socializing teachers to use prescribed theories or methods subjugates them to a power outside themselves (Duffy, 2002; Lortie, 2002; Rogers & Mosley, 2006); in this case the Reading Recovery program. Furthermore, it may be that socialization into the Reading Recovery program provided the identity as a reflective practitioner that can only be used within the context of Reading Recovery, just as prior to becoming a Reading Recovery teacher this identity would not have been available to them (Rogers & Mosley, 2006). Whether or not this reflective practitioner identity could now be taken and applied in a different
context (i.e., a regular classroom setting) or program (i.e., Success For All) is unknown. The best insight we have is Kim’s discussion of her fear of moving back into a regular classroom setting, discussing how “terrified” she was because she knew she wouldn’t be able to reflect in the same way. Since her reflective practitioner identity is so specific to the context of Reading Recovery, Kim may not be able to see herself as being reflective unless she has a one-to-one setting. She, and perhaps Dee, have developed their identities so specifically to the theory and structures of Reading Recovery that they may have difficulty transferring it to a different context. This is important as researchers have found the most successful classroom teachers of reading have been the most reflective (Duffy, 1988; Flippo, 2001; Roskos, Vukelich, & Risko, 2001). The context of their classrooms is certainly not a one-to-one teaching situation; however, they are able to reflect on their practice both in the moment and later. The yearning of Dee to become a reflective practitioner and Kim’s fear of losing that identity in a regular classroom are important insights in terms of identity being contextual specific. It also highlights how Reading Recovery influenced and fostered their identities as reflective practitioners. Reading Recovery influenced what they reflected about (nature) (what, why, when) and how they were supposed to connect, very specifically, those reflections to their practices. The theory of Reading Recovery so strong influenced their practice that teacher identity was not simply, “I’m a reflective practitioner,” it was a way in which reflection was thought of and how reflection applies to practice. Whether or not Reading Recovery teachers, trained specifically in when, why, where, and how to reflect can transfer that into a regular classroom setting remains unseen. It could be that reflectivity is so bound by the classroom context that there is no space provided for the teacher to use her/his
theoretical beliefs to guide teaching practices through reflection. Teachers are often not provided with the boundaries or what, how, where, and why to reflect in order to bridge theory to practice. What is understood is the reflective practices Kim and Dee have been trained to use and are continually fostered to use, do require them to bridge theory to practice. Whether or not teachers of reading are able to purposefully bridge their own theories of reading to their practice through reflection is unknown.

Data-driven Reflection Sequence

As highlighted by the RAND study group (2002), teaching reading is an interactive process where teachers must constantly gauge a child’s needs and abilities. Making teaching decisions must be related to the observations of students in the context of the activity (Rodgers, 2004). Similar to this sentiment is the notion of dynamic assessment and a teacher’s ability to craft his/her practice to a child’s needs (Vygotsky, 1986). Vygotsky’s theory of the zone of proximal development highlights the need for teachers to attend to children’s skills and needs. Importantly, Marie Clay was unique in the theoretical framework she used to help design work with children. In her early research and on into the development of the Reading Recovery lesson sequence, Clay highlighted the importance of the teacher remaining attentive to and reflecting on data that is strength generated, as opposed to deficit oriented. This particular inquiry highlighted how Kim and Dee’s systematic observations resulted in a three-step reflective process to help them think about and plan for the child within the context of the activity. By examining Kim and Dee’s reflections multidimensionally, I could see they were most often triggered by systematic observations of the child’s strengths and weaknesses during a lesson. The sequence within which reflection then occurred (i.e., (1) What is the child
doing?; (2) What does the child need?; and (3) What can I do to get the child where
she/he needs to be?) illustrates the intricate way they each linked their observations back
to theory. This also illustrates a three-step patterned process both participants used as a
successful strategy to attend to the cognitive processes each child used during lessons. As
noted in Chapter 2, Clay’s extensive research that led to the design of Reading Recovery
highlighted the importance of careful monitoring of counterproductive cognitive
strategies children were becoming engrained in using and providing children with
successful cognitive strategies to reinforce success. As they reflected on what the child
was doing, they did so within the theoretical framework of Clay’s theory of reading. The
same occurred when reflecting on what the child needs. As they shifted to thinking about
what they needed to do to assist the child they reflected within the context of Clay’s
theory of reading acquisition. It may be that this reflection sequence illustrates the way to
link theory to practice for all teachers of reading. As these reflections resulted in a
roadmap for participants to scaffold their instruction in a highly individualized way, this
process is absent from research on the decision-making processes of Reading Recovery
teachers (Jones, 2000).

As Kim and Dee used reflection to inform their teaching by scaffolding to the
unique and highly individualized needs, they also passed their reflective practices on to
the students to help them develop their own self-extending systems. In Reading Recovery
a self-extending system is a child’s ability to be consciously aware of the different cues
she/he is using (or needs to use) to comprehend a text successfully (Clay, 2005). While
much research related to the successful teaching practices of reading teachers has
highlighted the importance of helping students become metacognitive of their own
actions (Palinscar, 1998; Palinscar & Brown, 1984; Wertsch, 1985), it appears this process occurs as Kim and Dee strategically model their own reflecting and prompt students to be reflective of their actions. Instead of scaffolding their development by prompting, guiding, questioning, praising, etc., when the child moved through lessons successfully both teachers had them reflect on the strategies used in the successful reading of the text. In turn, children became reflective of their own practice. There has been no research conducted within Reading Recovery that addresses this “hand-me-down” nature of reflection. Additionally, literature on the self-extending system of a child does not mention their reflective practices. This finding is important for all teachers of reading who aim for the ultimate goal of children who are metacognitive of their actions. As researchers we discuss the importance of having children think about their thinking (Palinscar, 1998; Palinscar & Brown, 1984; Wertsch, 1985); however, we have not yet identified the role reflection plays in that process.

Figure 13 highlights the intricate way the theory-driven nature of reflection informs teaching practices and bridges the gap between theory and practice. In relation to the three overarching themes found in this inquiry, the figure highlights how within the context of Reading Recovery, the space for teachers to reflect allows them to think about theory while simultaneously attending to the strengths and needs of the child. When engaged in the three-step patterned process of reflection, participants refer back to Clay’s theory of literacy acquisition. This also highlights how this cognitive process is strategic, from the fostering of a reflective practitioner identity to the data-driven reflection sequence teachers should be engaged in. Once the teacher makes a decision, it informs practice in a myriad of ways. The teacher can teach to the child’s ZPD, plan for the
following day’s lesson, examine her/his own practices, and engage with colleagues to continue reflecting on practice. Again, all of these are continually tied back to their own practices situated within Clay’s theory of literacy acquisition. Theory is an ever-present factor in the reflections and decision-making of Kim and Dee, representing an intricate cognitive cycle which allows them to successfully attend to the individual needs of every child they work with. Implications from this discussion for teacher educators and teachers developing their own craft are discussed below.
**Implications**

While the purpose of this study is not to generalize to any other situations, this study has shown that reflection examined multidimensionally provides a lens through which the nature of teachers’ reflections and the way those reflections inform practice can be highlighted and offers a model for how the reflective process of two Reading Recovery teachers can be described. Additionally, others may find this research valuable in considering new directions for the Reading Recovery program and the broader educational community in the 21st century as we train and provide professional development for thousands of teachers of reading.

*Reflection: Bridging the Gap Between Theory and Practice*

It may be that the way to create a stronger link between theory and practice is through reflection. Research clearly illustrates there are benefits to teachers bridging theory to practice as it allows them to modify skills to fit specific contexts that results in new teaching practices (Cochran-Smith, 2005; Larrivee, 2000). Researchers have also highlighted the difficulty many teachers have bridging theory to practice (Duffy, 2002; Lortie, 2002). For Dee and Kim, the theoretical framework within which they positioned themselves was the source from which the nature of their reflections was anchored. It
appears there is a cyclical process that continually refers the teachers’ evolving understanding of the child and decision-making back to theory. These implications may be great for teacher educators whose difficult job is to help connect theory to real-world practice for preservice teachers (Delpit, 1995). Teacher educators might highlight the successful way Reading Recovery teachers seamlessly bridge their theory and practice through their reflections on systematic observation of the child. This might hold important implications for Supervisors as well. It is often the role of the supervisor to scaffold reflections of students to emphasize the work of beginning teachers (Feiman-Nemser, 1990). Supervisors might choose to engage preservice teacher’s analytic abilities by asking them to reflect on how they are linking their own theories of learning to practice through reflection, guidance that is especially critical during these early years of teaching (Colton & Sparks-Langer, 1992; Feiman-Nemser, 1990). The more students verbalize this, as was evidenced in findings from this study, the more metacognitive and reflective they were of their actions.

These implications for can be observed in teacher development for teachers of reading as well. While Reading Recovery teachers’ reflections are situated in the framework of Reading Recovery, classroom teachers of reading must first identify what contextual framework their reflections are situated within. Perhaps their reflections are bound by a scripted curriculum as has been the case in research on Success For All where teachers felt they lacked autonomy and the freedom to use creativity with their students (Datnow & Castellano, 2000). Perhaps their reflections are guided by a singular reading theory or parts of a few as Duffy (2002) suggests they should be to meet the unique abilities and needs of each student. And while it is understood the one-to-one context of
Reading Recovery within which Kim and Dee have provided space for reflection cannot be generalized to teacher of reading in regular classrooms, it may assist teachers in their decision-making to identify their own theories and use the data-driven reflective response sequence to meet the individual needs of her/his students.

_Fostering a Reflective Practitioner Teacher Identity_

Teacher identity is developed and fostered within specific contexts. And while becoming a reflective practitioner has been found to be a hallmark of teaching (Duffy, 2002; Larrivee, 2008; Mazzoni & Gambrell, 2003; Roskos, Vukelich, & Risko, 2001; Smyth, 1992; Zeichner & Liston, 1996), how (if at all) this identity is transferred within different contexts is not yet understood. It may be that the setting within which a reflective practitioner identity is developed is the only context within which it can be sustained and fostered. Within Reading Recovery a reflective practitioner identity was fostered through training experiences and nurtured through professional development in such a way that their teacher identity as a reflective practitioner was that as a Reading Recovery reflective practitioner. As teacher educators foster the reflective practices of novice teachers, we must be purposeful in also ensuring a flexibility to use reflection in different contexts. Just as there is no one-size-fits all approach to teaching children to read, there is one one-right-context within which one can reflect. Training students to reflect within various contexts and with others may help prepare them for the ever-changing classroom, school, and educational climate they will soon be working in.

Though limited in its scope of research, examinations of Critical Friends Groups have highlighted the importance and perceived value of reflection to be beneficial in collaborative meetings (Bambino, 2002), as the act of collaboratively reflecting with
peers was found to be instrumental in the perceived identity as a reflective practitioner. Structured opportunities to reflect fostered this identity. Recent research on Critical Friends Groups has found that reflecting in highly structured collaborative settings is highly beneficial for teachers, resulting in increased self-efficacy, greater awareness of their teaching strategies, and more opportunity to feel as though their voice is respected (Bambino, 2002). Likewise, my findings corroborated these results, highlighting the power of reflecting with others to share frustrations, help each other grow, and receive feedback about their own practice. Additionally, the findings of my research indicate that opportunities to reflect collaboratively can happen in spontaneous, unstructured settings in the form of eavesdropping. Dee talked frequently about how influential simply

/listening/ to other Reading Recovery teachers teach was on her practice. The idea behind listening, or observing another teacher and using that observation to reflect on your own practice is not new; peer coaching (Ackland, 1991; Joyce & Showers, 1982; Showers & Joyce, 1996), as it relates to regularly observing one another and providing support, companionship, feedback, and assistance (Valencia & Killion, 1988), has been in practice for years. One teacher observes while the other teaches and the two reflect together afterward (Joyce & Showers, 1982). What is interesting in this situation is that Dee did not reflect with the teacher afterward, instead, it was the act of listening that caused her to reflect on her own practice. Perhaps more frequent opportunities for teachers to simply listen to another teach and reflect on his or her own teaching practices would help them think through the decisions they make in the classroom. Teacher educators might also recommend opportunities for preservice teachers to observe each other and expert teachers in their own classrooms; however, as opposed to the traditional purpose of
observing to notice another’s craft, the teacher should observe with the purpose of reflecting on her/his own. What is unique in the case of Reading Recovery is that both teachers followed the same steps in a lesson and used the same theory to guide their practice; leaving one to wonder if the outcome would be the same for teachers with different teaching philosophies and pedagogies.

*Data-driven Sequence of Reflection*

Though research has highlighted different reflective practices of teachers (Davis, 2006; Griffiths & Tann, 1992; Hatton & Smith, 1995; Schön, 1987; Valli, 1997; Van Manen, 1995; Zeichner & Liston, 1996), this study is significant in its identification of a three-step reflective process Kim and Dee use to make in-the-moment decisions: (1) What is the child doing?; (2) What does the child need?; and (3) What can I do to get the child where she/he needs to be?. Though this is highly individualized, some teachers might benefit from reflecting in this way, especially when working with small groups of students or during one-on-one reading conferences. This reflective process helps Reading Recovery teachers attend to and scaffold their teacher to the student’s zone of proximal development (Vygotsky, 1987). Instead of a one-size-fits-all approach to teaching reading that is reflected in many reading programs today, this type of reflective questioning positions the teacher as a facilitator who is purposeful in her/his response to and planning around the child’s strengths, needs, and interests. Additionally, this three-step reflective process offers a means to scaffold the reflective practices of regular classroom teachers of reading to help bridge their theoretical perspectives to their actions.

For teacher educators, in an era when predefined reading programs are entering classrooms on a regular basis, we must prepare teachers to be “more flexible in their use
of methods, materials, and creative responses to children’s interests, strengths, and needs and less dependent on doing things according to these recommended patterns” (p. 340) so they do not fall back on traditional, “by the book” practices (Lortie, 2002). It may be helpful to provide opportunities for preservice teachers to observe successful teachers of reading teaching children and use this data-driven reflective sequence to make decisions about what they would do in the classroom. Gathering preservice teachers after this opportunity and discussing how the reflective process enabled them to link theory to practice may help them become more automatic using this sequence in their own teaching.

Suggestions for Future Research

These findings and implications point to additional research studies. First, researchers interested in extending these findings might increase the sample size and lengthen the duration of data collection. Reports from more participants would significantly enhance our understanding of the nature of teachers’ reflections and how they inform their teaching practices, as this was virtually absent from extant research. More specifically, there are theoretical and empirical suggestions for future researchers which have emerged from the findings that will contribute to the way we understand the nature of reflection, bound by time, type and context, and additional ways it informs teachers’ practices.

Theoretical

To define reflection and focus solely on time, one would ignore two major facets of the act that influence and inform teachers’ practices. Thus, when examining, interpreting, and explaining reflection, researchers must examine these multiple
dimensions as well as the relations that exist between them. If we, as researchers, fail to examine critical aspects of reflection when trying to understand how it informs practice we will be limited in the ability to generalize research findings to new settings. Likewise, I acknowledge that while a common definition for research will be helpful, trying to capture the sophistication of thinking about practice is easier said than done. Definitions that oversimplify minimize the power of the process. Overcomplicating the construct by trying to include every aspect of the reflection makes it difficult to contain. Therefore, other educators are needed to help further define this evolving definition for the 21st century. While I apply my historical lens and understanding as a researcher, it is only through conversations with colleagues and collaboration with others we can continue to strengthen our goal to empower teachers’ voice in the classroom.

*Empirical*

When compared to other research on reflection, no research could be located that had been conducted on the nature of reading teachers’ reflections, bound by time, type, and context, and how those reflections informed their teaching practices. This study contributes to our understanding of reflection and the myriad ways it informs teaching practices, specifically reading teachers’ practices. Future researchers should design a study that compares the reflective practices of classroom teachers to that of Reading Recovery teachers. Future researchers might consider examining the nature of reading teachers’ reflections involved in other reading intervention programs. We may come to understand how theory and practice are linked through reflection in various contexts. It may also explain whether the reflective process of Reading Recovery is unique because it is foundationally built upon the premise that teachers must be reflective.
Additionally, research should be conducted that examines the ways (if any) the reflective practices of Reading Recovery teachers change upon teaching in a mainstream classroom. As previously mentioned, in my final member check with Kim she explained she was leaving Reading Recovery to go back into a mainstream first-grade classroom. She discussed a concern about her ability to continue being the reflective practitioner she is today. Understanding how, if at all, the nature of her reflections and the way those reflections inform her teaching practices change would help illustrate similarities and disparities between the ability to reflect in one-on-one tutoring sessions versus whole class teaching practices. It would also illuminate if and how a reflective practitioner identity transfers from one context to another. Researchers need to examine experimentally the role of the teaching context on reflection and how it informs practice (i.e., one-on-one, small group, large group).

Additionally, as calls for being and developing culturally responsive teachers (Gay, 2000) grow in the 21st century, we must be critical reflective practitioners who examine our own personal and professional belief systems and change our practice in the form of social activism (Brookfield, 1995; Howard, 2003; Larrivee, 2000; Rogoff, 2003; Sokol & Cranton, 1998; Usher & Bryant, 1989; Webb, 2001). This type of reflection frees teachers to draw from many different theories, experiences, and beliefs, as well as challenging their own unexamined judgments, interpretations, assumptions and expectations, to work with children to empower them to be, not simply better readers, but social activists in the community. In addition, critical reflective practitioners promote issues of social justice through their teaching of reading (Larrivee, 2000). As I highlighted in my findings, Dee and Kim’s reflections provide a roadmap from which
they could navigate their craft. It is certainly not my intention to take away from this reflective practice, but to add to its already significant outcome for all students. Though critical reflection is not part of the model of Reading Recovery, as it is a goal for educators to becoming culturally responsive teachers, perhaps comparing a group of Reading Recovery teachers who use critical reflection to a group of teachers who continue reflecting in the Reading Recovery framework would highlight opportunities to weave critical reflection into the reflective practices of Reading Recovery teachers. Future research may tell us if more critical reflective practices could/could not fit into the framework of Reading Recovery to play an even more important role in linking theory to practice.

Perhaps the most important suggestion for future researchers of reflection is the purposeful consideration of the multiple dimensions (time, type, and context) that reflections occur within. Research that examines the nature of teachers’ reflections focused solely on the time they occur will miss other telling features of reflection that will help the educational community understand with more clarity the complex ways it informs teachers’ practice. If I failed to take into account the context within which both of my participants were reflecting, I would not have understood the purposeful nature of their reflections situated within the framework of Reading Recovery. If I failed to take into account the time reflections of participants were occurring I would not have uncovered the “trigger effect” of systematic observation that resulted in a three-step process of reflection on data-driven from child watching. If I failed to take the context within which reflections occurred into account I would not have identified the magnitude
within which reflection is situated in a contextual framework. Accounting for these three dimensions uncovers formerly overlooked aspects of reflection.

Conclusions

In this study, I examined the nature of Dee and Kim’s multidimensional reflections and the way those reflections informed their teaching practices. I found the nature of their reflections to be complex and situated within the contextual framework of Reading Recovery, informing their teaching practices by serving as a roadmap to scaffold individualized instruction and examine their own teaching practices. Dee and Kim both identified themselves as reflective practitioners. This identity fostered interconnectedness between their own teaching practices and the automaticity of their reflections. Furthermore, systematic observations of the child during instruction focused on actions of the child and themselves as a teacher and served as a trigger for reflection in a data-driven response sequence.

This study has added new understanding to the reflective process Reading Recovery teachers engage in as they link theory to practice through reflection. As we continue to strengthen the education system for the 21st century we can now explore the ways that teacher reflection in various classroom settings informs their teaching practices. While classrooms are more complex today than they were fifty years ago; with ever-changing student demographics, teacher demographics, educational programs, curriculums, and standards, classrooms will continue to grow more complex in next fifty years. With reflection as a hallmark of teaching, the opportunities for teachers to reflect should be expanding, not declining. The findings from this research contribute important information about the role of reflection and the many ways it informs teachers’ practices;
however, it is but a jumping off point for our future endeavors as reflective practitioners conducting research on reflection.

This research was initially inspired by my own feeling of “voicelessness” as an educator teaching children to read. Navigating the path between being a visionary (Duffy, 2002) who reflected upon reading development, theories, and research, children’s own personal experiences, cultures, and interests to make decisions in the classroom while simultaneously teaching from a scripted curriculum was no easy feat, sadly it often felt like a losing battle. As we are called to meet the major challenges in reading education in the 21st century this research helps highlight the critical role of reflection in the successful decision-making processes of teachers of reading. It gets at the foundation of teaching: being an effective teacher means knowing more than skills and strategies, it involves systematic observation of children focused on their strengths and needs that are used to reflect on many different facets of reading development, theory, research, and personal experiences, to modify practice accordingly. Coming full circle in our quest to understand more about reflection, Dewey (1933) shared the ability of reflection to help us understand ourselves within our actions; to Dee and Kim, this understanding results in a roadmap that continues to link their theory to practice and guide their decision-making with each passing day.
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APPENDIXES

APPENDIX A

### Daily Running Record Sheet

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<th>Text Title</th>
<th>Running Words</th>
<th>Error Rate</th>
<th>Accuracy</th>
<th>Self-Correction Rate</th>
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<td>2. Instructional</td>
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<td></td>
</tr>
<tr>
<td>3. Hard</td>
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</table>

**Directional Movement**

Analysis of Errors and Self-Corrections
- Information used or neglected (Meaning (M), Structure or Syntax (S), Visual (V))
  - Easy
  - Instructional
  - Hard

Cross-checking on information (Note that this behavior changes over time)

---

**INFORMATION**

- E: Error Rate
- SC: Self-Correction Rate
- MSV: Meaning, Structure, Syntax

---

162
## Daily Lesson Record Sheets

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
<th>Week / Lesson #:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Familiar Reading</th>
<th>New Text</th>
<th>Strategic Activities on Text</th>
<th>Letter Work, Breaking, Word Work and Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed</td>
<td>Prompted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**APPENDIX B**
APPENDIX C

Student Name: ______________________  Analysis for Lessons: _____ to _____

**Reading**

Reading Letters & Words

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## APPENDIX D

Examples of Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Doc(s)</th>
<th>Line #</th>
<th>Context</th>
<th>Wondering/Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Leader to aid reflection on activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(sub-cat) continuing contact session)</td>
<td>CC</td>
<td>28-30</td>
<td>How do you make decisions? What informs your teaching decisions? What do you see at p.o.d? What do you do about it?</td>
<td></td>
</tr>
<tr>
<td>Collaborative Reflection resulting in growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(sub-category) collaborative reflection results in new strategy/thinking</td>
<td>402B</td>
<td>71-77</td>
<td>Maybe she's not anticipating or thinking about the different meanings. She might need modeling. You showing her this is what it is. Saying, 'in the book this is how it sounds.' You can explain what that word means. (see rest of passage for explanation)</td>
<td>Uses an example to help K understand what could possible be happening with V from sharing personal experiences.</td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>84</td>
<td>Okay, I've never done that. I'll work on having her break the word apart.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>402b</td>
<td>260-261</td>
<td>So you've got to show her to start thinking about spelling and at the point of difficulty she can't drop to word level. She's going to use visual strategies to help her there.</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Doc(s)</td>
<td>Line #</td>
<td>Context</td>
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</tr>
<tr>
<td>------</td>
<td>--------</td>
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<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>265-267</td>
<td>You need to foster her independence. Come in and start with prompting with meaning and structure, the visual will come after that, but she's got to get the structure and meaning down first.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>290-292</td>
<td>Just tune your ear to that. Don't let go. Teacher her to monitor. Teach her that visual cues aren't used to solve, but to support her reading and writing. Once you've got structure going you'll be able to use that to help with the visual and I bet she'll take off.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>52</td>
<td>yes. I need to change something.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>55-56</td>
<td>I need to shift and find a way to make her less dependent on me and she needs to know that she's right and how to move on without my prompting.</td>
<td></td>
</tr>
<tr>
<td>(sub-cat) coll. Ref. reveals assumptions</td>
<td>402B</td>
<td>288-289</td>
<td>I've just assumed its her language that gives her trouble and have assumed she's getting the other parts and she may not be getting it. I’ve just assumed that.</td>
<td></td>
</tr>
<tr>
<td>Building theory into practice through collaboration</td>
<td>402B</td>
<td>65-66</td>
<td>You're doing something Clay talks about. What is it she says? You keep working until all ingenuity runs out. That's what you're doing.</td>
<td></td>
</tr>
</tbody>
</table>
|      | 402B   | 276-283| Yes. It may seem like you're giving it to her, but think about what Clay said. You want to lift that piece up so they can access the visual. She calls it 'taking the bugs out'. You need to show her how to anticipate. Give the child the opportunity to hear and use new structure. This way you are setting her up for success. Then, when she
<table>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>gets wobbly and appeals you've helped her on the front end and she'll be able to check herself.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>402B</td>
<td>310-313</td>
<td>TL talking: this has been great because it's helped me to think about my own kids. I have two in ESOL and I haven't been thinking about structure. You know, it's book language and that doesn't make sense to them when they are learning our spoken language. We need to help tune their ear and tune our own...support that.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IA</td>
<td>168</td>
<td>So we always keep each other in check</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IA</td>
<td>149-159</td>
<td>See this passage. D talks about the power in listening to her colleagues teach lessons and reflects on the way they are teaching to help her grow</td>
<td>This is a completely different type of collaborative reflection...ponder this</td>
</tr>
<tr>
<td></td>
<td>IA</td>
<td>179-182</td>
<td>I just think collaboration and experience...reflection has a lot to do with that too because there are kids that once you've had certain experiences with them...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>501B</td>
<td>118-125</td>
<td>K put boxes for 'got' to help B write and sound it out. K: You can check that by sliding your finger underneath and sound it out the whole way. Is it right? GGGGoooottttt.</td>
<td>This notion of modeling how to do this to the students so they can help themselves is exactly what Kim and her teacher leader reflected about in their teacher leader conference. I've never observed her doing this before now. Whew-hoo!!</td>
</tr>
</tbody>
</table>
APPENDIX E

Research Log

What is the nature of RR teachers’ reflections?

How do those reflections inform their teaching practices?

Date: 11/12

Purpose: Open Coding Interview B

CONTENT:

Transcribed Interview B. Open Coded, entered codes into coding manual

PROCESS:

I left large margins and double spaced my fieldnotes to make it easier to code data and leave room for notes. After writing my fieldnotes I wrote a memo recording my own wonderings and thoughts.

I read through the interview and looked for any words, sentences, phrases, incidents, patterns of behavior, subjects’ ways of thinking, and events that repeated themselves or stood out or fit into my existing categories. I looked through my data for regularities and patterns as well as information that covered my topic. As I found these, I wrote down words or phrases to represent the sorting of my descriptive data, providing me with a means for sorting the data. This list represented additional coding categories or were added to already existing coding categories. Categories were then entered into a table and their respective examples were notated beside the code for the category. This would make locating the example easier. Additionally, coding categories already existed and some coding categories were refined by turning them into subcategories. Within each category I further analyzed the codes which resulted in the emergence of themes related to each category. Sub codes were also delineated resulting in additional categories and wonderings. My personal wonderings were initial steps into axial coding where I examine my data in pieces and try to make sense of its meaning as a whole. Though not formally axial coding, I did this within some categories.

I continued to refine and take apart larger pieces of my categories to analyze them separately. After entering codes from my interview new categories such as: reflection in action, reflection on action, reflection evidenced in practice, reflection on child, reflection on self, combination of reflection, collaborative reflection, and a miscellaneous tab with
codes that are not large enough yet for their own tab, and sub categories were all given separate sheets in the coding manual. Within each of their respective documents the data were further refined. To date, I have 29 codes, 24 sub-codes, and 9 sub-sub codes.

See Coding Manual 11.12 for list of codes from the open coding of Interview B. See memos and research reflections for my wonderings and informal axial coding.

RESEARCHER REFLECTION/S:

Love the idea of reflection as a roadmap. Here’s the idea that you would be lost without reflection. Additionally, while reflection isn’t the “vehicle” to meet your students’ needs, it’s the avenue to get there. This is fascinating!

Some very important additional information related to reflection emerged during the interview. The “lightbulb effect” might be worth member checking on. I love this notion that reflection-in-action reveals ‘aha’s that help you further develop your roadmap.

Additionally, K also discussed several unique aspects of RR and how they are different (training and practice) than in regular classrooms. This will be important in the discussion section to delineate how reflection is used in RR-possibly leading to how it could be used by literacy teachers? Don’t know. This will come with further analyzing and axial coding.