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RECONSTRUCTING SCAFFOLDED WRITING INSTRUCTION

FROM READING RECOVERY

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy in the Graduate School of The Ohio State University

By

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ABSTRACT

Conventional wisdom regarding teaching, learning and development is being redefined as scaffolded interactions between teachers and children demonstrate the power of working at the cutting edge of a child's learning potential or their zone of proximal development. Recent criticism of scaffolded instruction asserts that it is rigid and does not acknowledge complex social relationships. The writing portion of the Reading Recovery lesson, characterized as scaffolded learning, has been a focus of this criticism. This study examined the ways in which two Reading Recovery students generalized or reconstructed new understandings during independent classroom journal writing. The theoretical constructs of self-regulation and inner speech framed the study. Twelve weeks of lessons in Reading Recovery and independent writing in the classroom were videotaped, teachers students and parents were interviewed, and all of the children's writing was analyzed. Time, explicit links provided by both the Reading Recovery and classroom teachers, the individual nature of children, and the process of rereading written text surfaced as important factors in children's ability to construct flexible mental plans or become self-regulated for writing in new contexts. This study provides evidence that the scaffolded interactions in Reading Recovery do not shut down writers: rather the students in this study flourished as writers. Thus, if children in Reading Recovery demonstrate a reluctance to write, the expectations of the classroom environment or how the Reading Recovery teacher is interacting with the students should be considered. The findings of this study demonstrated how scaffolded instruction in one context impacted subsequent behavior in another context in a positive manner.
To my incredible parents,
Chuck and Doris Anderson
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CHAPTER 1
THE NATURE OF THE PROBLEM

Conventional wisdom that has permeated teaching and learning is undergoing a dramatic shift. Psychologists, anthropologists, linguists, and educational researchers, building on knowledge from multiple disciplines, have constructed a new vision of children's literacy in recent years. Central to this new vision, a constructivist stance towards knowledge and learning asserts that thinking processes are constructed by individuals who are embedded in a sociocultural context (Vygotsky, 1978; Vygotsky, 1986; Wertsch, 1985; Wood, 1988). Bruner (1990) asserts, in order to fully understand the development of cognition, we must consider the biological origins of humans and the cultural and linguistic context that provides the symbolic world in which they live. Then, the growth processes that bring these two powerful forces into concert must be carefully considered when conceptualizing the way cognition develops. Children learn what they live, hear and speak in a context of meaningful, functional use of language with people who care about them and who have confidence in their ability to learn (Cazden, 1992). Cognitive development is interwoven in interactions between children and adults as they participate in social activities. Adults stretch children's understandings of and skill in using the tools of the culture (Rogoff, 1990). No longer are students viewed as passive vessels into which we pour knowledge. We now view children as active from birth on, constructing knowledge through their innate mental capacities and equipping the ability to search for meaning and make sense of their world (Bruner, 1990).
This study describes the way children construct an understanding of literacy, specifically writing. Two contexts are examined in order to reveal how understandings constructed in one context are reconstructed by the children in another setting. The two contexts that informed this study include, Reading Recovery (RR), an early intervention program for at-risk first graders, and independent writing in the classroom.

**Constructivist Theories of Literacy Learning**

Research on children's oral language acquisition supports the description of children as active hypothesizing language users (Holdaway, 1979; Wells, 1986). Careful longitudinal research in classrooms, documenting children's early literacy acquisition, demonstrates that children actively construct unique understandings of literacy (Clay, 1991a). Research demonstrates that children's attention is selective: their object of focus shapes the way they construct their learning environment, which in turn affects their responses within that environment (Clay, 1991a). Responsive teachers take into consideration the children's context and respond to the constructions children build in their minds.

When young children learn the complex processes involved in literacy acquisition, they must not only learn the grammatical features of the language, but also aspects of literacy events their culture defines as important. Their task is not simply to map their verbal capacities in printed language, but also to learn which features of the world have to be learned and how to utilize this knowledge in new contexts (Cazden, 1992). As children become literate, they learn how to apply their new understandings into the multiple contexts of school and home.
Heath's research demonstrates children construct different definitions of what it means to be literate based on their cultural context and its functional use within their homes (Heath, 1983). Teachers not only must understand that children construct their own understandings of literacy, but they must also provide vital links for children from different cultures within the new context of formal schooling (Gee, 1990). The implications of this perspective on educators are far reaching.

Previous studies have documented the success of Reading Recovery (Lyons, Pinnell, & DeFord, 1993a) as a viable program that serves to help children build these complex understandings. Reading Recovery has been described as an "effective" (Hiebert, 1994) and "robust" (Shanahan & Barr, 1995) program, both in terms of its consequences for student learning and its replicability across sites. Reading Recovery teachers create customized programs for individual children based on their strengths and needs. The teacher-student interactions within the context of Reading Recovery lessons have been characterized as "scaffolding" (Hobsbaum, Peters, Peters, & Sylva, 1996; Wong, Groth, & Flahavan, 1994).

**Scaffolded Learning**

A vast body of research demonstrates the power of parent-child dialogue and interactions during the acquisition of spoken language (Rogoff, 1990). Furthermore, the types of interactions that occur between caregivers and children affect subsequent cognitive development (Diaz, Neal, & Amaya-Williams, 1990). Vygotsky (1978) proposes a child's capacity to learn is not a static phenomenon. Potential for learning is dynamic, and it is designated as a constantly shifting area. The distance between the current level of development and the potential level of development a child can demonstrate with the
collaborative guidance of an adult or a peer constitutes a child's potential. The region between these two dynamic levels of development is a child’s “Zone of Proximal Development” (Vygotsky, 1978).

Researchers have examined this sensitive developmental region by characterizing the interactions between adults and children and the subsequent developmental shifts that occur. There are in-depth reviews in the literature (Rogoff, 1990) characterizing the interactions as “scaffolding” (Wood, Bruner, & Ross, 1976), demonstrating the power of Vygotsky’s conception of Zone of Proximal Development for teaching and learning.

During scaffolded interactions, the planning and execution of the action is initially shared by the adult and child. The adult gradually relinquishes control as children demonstrate the ability to initiate, plan and control the learning on their own.

In classrooms, Tharp and Gallimore (Tharp & Gallimore, 1991) describe scaffolded interactions as instructional conversations. Teachers, “leading from behind,” engage children in conversations. Utilizing systematic observational techniques and their understanding of how literacy develops, Reading Recovery teachers have a strong sense of where the instructional conversation needs to go, but let the children find how to get there through their own sorting and sifting using language. They provide just enough demonstration, support and questioning to help the child move forward in development. Teachers must be able to problem solve individual student needs on the run and respond quickly, so they do not lose a valuable teachable moment within the course of the child’s development.
Peers may also act as the more knowledgeable other in scaffolded interactions and studies have documented the value of peer interaction (Freedman, 1994; Sperling, 1993). The scope of this study encompasses only teacher-student interactions and is not meant to infer that adults may be the only source of instructional conversation that may propel a child’s development.

**Speech and Cognition**

When children demonstrate the ability to plan, execute, and control their voluntary actions they have developed self-regulation. This study proposes to look at the voluntary act of writing. Children's speech plays an important function in their development and control of voluntary acts (Luria, 1981).

Initially, children utilize language through speech actions, serving a social function. Through shared experiences, engaging children in activity, the adult regulates the child’s behavior. Demonstrating emerging independence, a phenomenon labeled “egocentric speech” emerges (Piaget, 1955). Diaz has labeled this speech “private speech,” and this will be the term used through the rest of this document. Vygotsky asserts egocentric speech represents children’s thinking “out loud,” giving windows into their thoughts (Vygotsky & Luria, 1993). As children begin to become self-regulatory, the private speech disappears and children transform it or condense it into inner speech. Figure 1 illustrates the relationship between the development of cognition and language.
Children use language to help guide and control their actions. Luria's research demonstrated how children use speech to help them control activities like spelling words. If children were not allowed to speak, they could not spell words they were capable of while speaking. Vygotsky (1986) characterizes this developmental transformation of other to self-control, within the zone of proximal development, as the emergence of inner speech (Vygotsky, 1986). When children develop inner speech they become able to self-regulate or plan and execute their own actions.

The origin of speech that helps guide and control actions may be found in the social negotiations that take place between the child, his/her peers, and adults. These conversations, where the adult's language and actions support the child's new behaviors, are the heart of the zone of proximal development. The dialogue that takes place between teachers and students while working in a child's zone of proximal development is central to helping students become literate beings who can read and write independently (Tharp & Gallimore, 1988).
Instructional Implications

The greatest implications of Vygotsky’s notion of development being dynamic rather than static are for young children who demonstrate difficulty in learning to read and write. Labeling these children as “low achievers,” the resulting instruction, because of its low expectations, perpetuates the students’ difficulties rather than moving them forward developmentally. Opportunities to read and write for meaningful purposes are replaced by decontextualized literacy tasks, reducing reading and writing to skills performed on worksheets (Johnston & Allington, 1991). The active hypothesizing language user, who learned to construct meaning as he/she developed oral language, becomes passive in the context of school and ceases to benefit from productive learning opportunities (Clay, 1991a; Stanovich, 1986). Meanwhile, children considered of average and high ability continue to read and write in more meaningful contexts, moving forward in development. The existence of a “rich get richer and poor get poorer” phenomenon in our schools, termed the “Matthew Effect” (Stanovich, 1986), is a possible explanation of why our schools have historically failed with non-elite populations (Gee, 1990).

Reading Recovery, an early intervention one-to-one tutorial, designed for children who demonstrate difficulty in learning literate behaviors early on, is an example of an application of Vygotsky’s theories on learning, language, and scaffolded assistance through social interaction (Clay & Cazden, 1990). Studies of Reading Recovery have characterized the teacher-student interactions and documented how they shift over time in response to student behavior (Pinnell, 1995). Thus far, researchers have described the teacher-student interaction as “scaffolding” (Hobbsbaum et al., 1996; Wong et al., 1994), “responsive,” “balanced,” and “mother-child dyad” (Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994).
Elliot (1994) characterized teacher-student interactions in RR as "responsive teaching." A case study approach was used as the researcher attempted to examine decision making by one effective RR teacher. She defined this as a process of observing and interpreting information about one child's reading/writing behaviors. Then a transaction was formed with the teacher's knowledge base and process of making decisions while teaching (Elliot, 1994).

Dorn (1992) studied the types of conversation that occurred between the teacher and child during the period of a child's program called "Roaming Around the Known." Reading Recovery teachers attempt to make the child an active participant in learning by guiding him in gaining further control of the literacy knowledge he/she already possesses (Dorn, 1992). This period lasts for two weeks prior to beginning lessons. Dorn suggested this interaction is comparable to a mother-child dyad, as she studied two African-American male students in a small rural school through a case study approach.

Critiques of Scaffolded Instruction

The term "scaffolding" has been used to characterize a teaching setting in which the teacher guides, organizes, and extends a child's learning. Recent criticisms however, attempt to emphasize a different vision of teaching and learning. Some criticisms claim scaffolding ignores the ideological complexities of children's worlds as they relate to class, race, and cultural power issues in their everyday lives (Dyson, 1995). Furthermore, scaffolding has been characterized as "one way socialization" (Mehan, 1980) and Searle (1984) claims the interactions are a rigid sequence imposed upon the learner.

Searle contends scaffolding is being misinterpreted in the teaching field and is being used to justify long-standing questionable classroom practices. The teacher is too often the
builder of the rigid scaffold and the child is expected to occupy the predetermined sequence of knowledge. The scaffold may provide a rationale for teachers who feel children’s language is deficient. Their home language is not honored, thus robbing them of a valuable resource to connect to new learning. Searle contends our goal should be to encourage children to adapt their own language resources to achieve new purposes.

Newkirk (1995) argues along Dyson’s lines, questioning whether social relationships have been moved to the background when considering the effect of teacher-student interactions. When children interact with teachers during writing conferences, learners play their role of the passive recipients of the teacher’s agenda. If the aim is so help children construct their own understandings, the social power of the teacher in the context of the classroom may be a powerful influence negatively or positively in the child’s development.

Regie Routman, a noted expert on whole language teaching, recently addressed critics who claim Reading Recovery is too directive and rigid (Routman, 1996). In particular, she notes how some writing process pedagogists view the writing portion of Reading Recovery lessons as anti-whole language because the child is not allowed to use invented spelling. They contend the use of conventional spelling in the collaborative negotiations during the writing portion of Reading Recovery lessons do not allow children to utilize their natural problem solving capabilities, those same capabilities the children utilized when they learned to speak (Brown & Bellugi, 1964). Research has demonstrated that these same capabilities through the use of invented spelling (allowing children to approximate and problem solve written text) ultimately result in movement towards conventional spelling (Read, 1971). Some critiques of Reading Recovery go so far as to
assert that the program violates the principals of writing development (Barns, 1997).

Clearly, there is some confusion regarding the way that children construct knowledge in Reading Recovery lessons.

**Reconstructing Scaffolded Instruction**

A multi-disciplinary, sociocognitive view of literacy (Langer, 1988) proposes children learn not only the acts of reading and writing, but that they learn how to be literate in specific social contexts and construct individual understandings of what counts as literacy specific to that context. Teacher-student interactions within the context of Reading Recovery create shared understanding between the student and the child as to what counts as literacy in the context of the lesson by creating a discourse system of instruction. A discourse system represents tacit and overt understandings about what is valued, what behaviors are appropriate, and how language is used to communicate those beliefs (Gee, 1990). Gee asserts when discourse systems of children and adults in schools are not in congruence, the transition to school may be difficult. The child struggles to understand how to use his/her discourse system in a new unfamiliar and (what may become) unsupportive context. Many times teachers unknowingly perceive children as “slow” because they use language differently.

Criticism of scaffolded instruction and the writing portion of Reading Recovery leads to the question of how the instruction in Reading Recovery is reconstructed into the students’ tacit and overt understandings as evidenced in their independent writing. The goal of Reading Recovery is to return the child to the classroom with self-regulatory behaviors that power further learning. The social and private speech (egocentric speech) of
children surrounding independent writing events gives insight into their thinking and how they mediate or make sense of the shared learning constructed in Reading Recovery.

Furthermore, no research has examined the nature of scaffolded instruction within the writing portion of the Reading Recovery lesson in the United States to described the way children reconstruct this knowledge in their independent writing in the classroom or in other contexts. Research along these lines will help not only Reading Recovery teachers understand how children become self-regulatory with regards to their writing, but will also address the question of how Reading Recovery affects students’ writing outside of the context of Reading Recovery.

Problem Statement

Conventional wisdom regarding teaching, learning and development is being redefined as scaffolded interactions between teachers and children demonstrate the power of working in a child’s zone of proximal development. Recent criticism of using the Zone of Proximal Development asserts that it is rigid and does not acknowledge complex social relationships. The writing portion of the Reading Recovery lesson, characterized as scaffolded learning, has been a focus of this criticism. Follow-up studies (Pinnell, 1995) have documented that Reading Recovery children transfer the new knowledge into classrooms. This study will examine the ways in which Reading Recovery students transfer, reconstruct and transform these new understandings during independent classroom writing.
Purpose of the Study

Two purposes encompass this study: first to describe in detail how children's literacy understandings shift over time as a result of the scaffolded instruction in the writing portion of the Reading Recovery lesson; second, to examine how students reconstruct their understandings outside of the context of Reading Recovery, as evidenced by their speech and writing behaviors during independent writing. Knowledge gained in this careful documentation will provide insight into (a) how children reconstruct new learning in classrooms from tutorial settings utilizing scaffolding as instructional technique; and (b) how scaffolded instruction impacts subsequent behaviors in different contexts.

Significance of the Study

A better understanding of the teacher-student interactions in Reading Recovery and how students reconstruct new knowledge will provide important information on the way classroom teachers may interact more effectively with children on their path to literacy. A description of two children as they participate in Reading Recovery lessons and write in their classroom will shed some light on the role of "scaffolded" events in the integration of new knowledge. How children create new structures for thinking and learning about literacy in multiple contexts will inform not only Reading Recovery educators, but also educators interested in "scaffolding" as a viable instructional technique.

The way children reconstruct knowledge is especially relevant in light of current methodologies which utilize a scaffolded approach to classroom instruction. A Reading and Writing Workshop approach (Graves, 1976) (see definition of terms, at the end of this chapter for further explanation of this approach to teaching writing), utilizes one to one conferences to individualize learning for students. Teachers who understand the
importance of their conversational interaction with children will begin to explore and attempt effective practices, perhaps of the nature found in Reading Recovery.

In addition, this study will address critics of scaffolded instruction and writing instruction as it relates to Reading Recovery. A constructivist perspective will give insight into how scaffolding is not the transmission of knowledge, but rather by nature, enables children to transform new learning on their own. Information will be gained as to how teachers may facilitate the strengths children bring to literacy learning, be it their oral language strengths or knowledge from another context. This will allow teachers to help children make important transitions that allow them to reconstruct their knowledge in meaningful ways in a new context. Facilitating links between one learning context and another may help not only children in Reading Recovery, but classroom teachers faced with children of different abilities from different programs.

**Research Questions**

1. What writing behaviors shift from shared to self-control in the instructional interactions during the writing portion of Reading Recovery lessons?

2. How do children's understandings of writing shift over time in relation to their new experiences in Reading Recovery as evidenced in their independent writing behaviors?
   a) What evidence of the self-controlled behaviors learned in Reading Recovery can be found in the self-regulated behaviors of children's independent writing?
   b) How are children's behaviors similar to or different from those demonstrated in the context of the Reading Recovery lesson?
Definition of Terms

**Cognitive Development:** Changes in an individual’s thoughts, intelligence, and language as they develop over time.

**Cognitive Tools:** Internalized tools extend mental abilities, helping humans to remember, attend, and solve problems. Mental tools differ in each culture. Historically, they are passed on from generation to generation. Children control their environment and behaviors through mental tools. Language and mathematical notations are cultural cognitive tools.

**Constructivism:** Humans bring to each learning situation individual perceptions, understandings, and beliefs that have been formed by their prior experiences. When new experiences are encountered and mediated, new meanings and knowledge are constructed. This implies individuals may construct different worldviews depending on their experiences, perceptions, and the nature of the context. Social contexts affect the way new experiences become integrated into an individual’s existing meaning and knowledge base.

**Hierarchical Order:** Information in print is organized in a hierarchy of levels. Discourse levels, sentence, word, letter cluster, and letter and sub-letter levels are some examples. Children must learn which level to attend to at any given point in time (Clay, 1991a) as they learn to read.

**Independent Writing:** In this study, independent writing means writing that the child conducts without the help of an adult. During this study the writing interview serves as an opportunity for children to write without support. Additionally, journal writing in the classroom is also considered independent writing although children engage in conversation
with other students that serves as a source of information as they write. Occasionally the
teacher engages the children in instructional conversations termed "writing conferences,"
but primarily the writing is conducted in the social setting of the classroom independently
with their peers.

**Inner Speech:** Speech that is totally internal, inaudible, self-directed, but retains
some of the characteristics of external speech. Inner speech has its origins in social speech
and the language used in the specific sociocultural context of the learner. Inner speech
allows humans to control higher order mental operations like selective attention, problem
solving, and literacy (Vygotsky, 1978).

**Internalization:** The process of appropriation or learning to the point where the
tools used are mental and unobservable (Vygotsky, 1978).

**Private Speech:** Self-directed speech that is not intended for social purposes of
communication. Private speech helps children control their actions as they become
internalized (Diaz et al., 1990).

**Reading Recovery:** In schools where Reading Recovery has been implemented,
trained Reading Recovery teachers use their judgment and a battery of six measures called
the "Observation Survey" (Clay, 1993) to select the most at-risk children from the lowest-
achieving children of their classrooms. In addition to regular classroom reading
instruction, these children receive one-to-one lessons for thirty minutes each day. Each
lesson includes five components:

- Reading many known stories (familiar reading)
- Reading a story that was read once the day before (Running Record)
- Word Analysis
- Writing a story
• Working with a cut-up sentence from their story
• Reading a new book that is read independently the next day

During these holistic reading and writing tasks, teachers use special techniques to help children develop the effective strategies that independent readers use. Students learn to predict, confirm, and understand what they read. As they write, they develop strategies for hearing sounds in words, representing messages, and for monitoring and checking their own reading and writing.

During each lesson, the teacher observes the child acting on a variety of texts and systematically records these observations to form the basis for the next lesson. The teacher may select the most appropriate text for each child from a book list of over 10,000 books which is revised and added to yearly. Individual instruction continues until the child has developed effective strategies for independent learning and can function satisfactorily without extra help in regular classroom reading. The intervention is then "discontinued" and another child is given an opportunity to participate in Reading Recovery. Programs generally require 12-15 weeks, although some children may need as long as 20 weeks (DeFord, Lyons, & Pinnell, 1991).

**Reconstruct:** How the skill or knowledge changes when applied in a new context after transfer takes place.

**Representational System of a Culture:** The signs and tools that develop over time that allow humans to represent and control their environment. Examples are language, art, and mathematical symbols.

**Scaffolding:** The support provided by an adult for children learning how to perform a new behavior. The adult provides a framework of cognitive support that allows the child to complete actions he/she is incapable of performing alone (Wood et al., 1976).
**Self-Control:** Self-Control indicates the child is forming new cognitive structures and plans of action, but is not yet flexible in applying them in new situations (Diaz et al., 1990). Children execute behaviors in relation to their environment. The adult may not be present but the child is able to perform the newly learned behavior. Self-Control indicates the presence of private speech (Diaz et al., 1990) which originates in social situations.

**Self-Regulation:** The behavior is guided by a self-formulated plan or goal and is flexible. The new behavior has a functional system that can be changed or adjusted according to changing goals. Environmental tools and signs help the child attain goals that are self-formulated. It is different from Self-Control mostly in its flexible adjustment of behavior to changing situations (Diaz et al., 1990).

**Serial Order:** A sequenced movement, that controls separate acts. The directional behaviors and visual scanning patterns necessary for reading may be described as a serial order task (Clay, 1991a).

**Shared-Control:** The child and adult share control of a new behavior. The language and actions of the adult direct the child's attention to salient features of the action that must be coordinated to perform the action in an appropriate manner. Children are not able to initiate, plan, or execute the behavior without the help of the adult (Diaz et al., 1990).

**Sociocultural:** This view of development focuses on three interacting forces in development: (a) the biological history of the species; (b) the cultural context and its signs and tools; and (c) the way humans represent their environment in their brain, or the way they mediate their experiences.
**Transfer:** The ability to use a skill or knowledge developed in one situation or context in a different situation. The skill moves from context-dependent to context-independent.

**Writing Process:** During the 1970s and 1980s the work of experts like Donald Graves, Don Murray and Lucy Calkins resulted in the development of the writing process approach to teaching writing. It espouses that children learn to write by writing and purposeful communication needs to be the focus of the writing curriculum. Children write on topics of their own choice as they go through the writing process (planning, drafting, revising, editing, publishing) in a recursive manner, not in a lock step, or linear approach. Teachers instruct children through short concise lessons before offering them sustained writing time. Teachers also instruct children through individual or group writing conferences tailored to the specific needs of students. The lessons and conferences cover all aspects of writing from form to conventions. Children participate a wealth of opportunities to share and celebrate their writing so that the communicative aspect of writing is realized by the young authors.

**Zone of Proximal Development:** Vygotsky (1978) defined cognitive development not as a static, but a dynamic phenomenon. Development occurs on two fluctuating levels which form the zone of proximal development. The lower level is the child’s independent performance, what the child knows and can do alone. The higher level is the maximum level of cognitive performance, what the child can accomplish with the assistance of a more knowledgeable other. Between these two levels are varying degrees of partially assisted performances.

The skills and behaviors in the zone of proximal development are dynamic and constantly changing. What the child can do today with the assistance of a more
knowledgeable other is what the child can do tomorrow unassisted. Various behaviors exist simultaneously within the outer and inner limits of the zone. Thus, the levels of cognitive development will change as the child develops.

Assumptions

Four key assumptions frame the study based on constructivist theories of learning and development that describe the social origin of complex mental processes like literacy learning in a given culture.

1. Learners are active constructors of their own understandings.

2. Vital experiences inviting reflection and inquiry shape thinking.

3. Language is a tool for, and shapes, thinking.

4. Culture provides a "tool kit" for learning.

5. Interactions encompassing the previous four assumptions allow learning to lead development through engagement in children's zone of proximal development.
Overview

The present study documents how children reconstruct the scaffolded instruction experienced in Reading Recovery lessons over time and apply this knowledge in classroom writing events. Careful observation of two children over a period of twelve weeks uncovers the nature of children's reconstruction of scaffolded instruction in Reading Recovery and classroom writing opportunities.

See chapter two for a review of related literature. Chapter three offers methods and procedures utilized during the investigation and data analysis. Chapter IV describes the results of the study; and Chapter V contains a discussion of the findings, implications, and directions for further research.
CHAPTER 2
REVIEW OF RELATED LITERATURE

Introduction

Review of the literature pertinent to the study of how children reconstruct scaffolded instruction in writing from one setting to another will begin with an explanation of Vygotsky's theory of cognitive development, followed by a review of three bodies of research: (1) The role of language and cognitive development; (2) The role of language in writing development; and (3) scaffolded instruction.

Language and Cognitive Development

Through language, adults and children make sense of their world, communicating socially and representing their world inwardly. Language serves as a cognitive tool as well as the basis for how speech becomes part of our thinking. Only when children acquire language do they begin to plan and control their actions (Luria, 1981). In order to account for how the development of inner speech helps children gain control over their actions, a description of Vygotsky's theory (Vygotsky, 1978; Vygotsky, 1986; Vygotsky & Luria, 1993) serves to frame the perspective on language and cognitive development (Vygotsky, 1978).

Vygotsky's General Theory

Two themes can be identified in Vygotsky's work. He proposed that human mental activity is created by mediation by tools and signs, primarily speech and that higher mental functioning in an individual has its origins in social activity. Rather than focusing his studies of psychology on attempting to reduce mental activity to observable behaviors in the
laboratory, Vygotsky aimed to study complex mental behaviors in action. He focused on the mechanisms of growth and change of higher-order mental operation such as literacy. Vygotsky and his colleagues in Russia reshaped psychology and the study of development and learning by moving away from a behaviorist stand towards research and the study of the mind. They proposed human cognitive development could only be seen considering historic (the development of the human species), and cultural (the development of groups of people), and mediational (the development of the signs and tools the humans used to adapt and change their environment) constructs.

Humans make sense of their world through the use of psychological tools. Like material tools that give humans control over nature, psychological tools give humans control over their mental behavior. Vygotsky distinguished between elementary and higher order-mental behavior (Vygotsky, 1978): the former consists of the mental capacities that are natural and biological; the latter, such as logical behavior, selective attention, problem solving, and comprehension of language, are products of mediated activities. The mediators of these activities are psychological tools or signs. Tools give humans the ability to regulate their behavior and change the elementary forms of mental behavior innate in humans. Natural or elementary forms of thinking are transformed into higher forms of thinking. Vygotsky called this process semiotic mediation.

**Social Origins of Higher Mental Functions**

Vygotsky described the transition from elementary to higher mental functions as a process of internalization and transformation. The child, who possesses elementary mental functions bound by sensory input within a specific context, is first introduced to higher mental functions in the social context or intrapsychological plane, which exists between the
child and another person. Through interaction, the child transforms and internalizes the operations or actions shared on the interpsychological plane. The transformed actions then become part of their interpsychological plane. This plane exists in the child's mind.

Any function in the child's cultural development appears twice or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category... internalization transforms the process itself and changes its structure and functions. Social relations or relation among people genetically underlie all higher functions and their relationships (Vygotsky, 1978, p. 178).

The process of internalization is not simply copying external reality, but rather social reality is an interactional force in development. Tools and signs allow individuals to represent and affect their environment and their own cognition. With the emergence of higher mental functions, those elementary mental functions that precede are not replaced, but changed or transformed into new forms.

Rogoff (1995) prefers the term “cultural appropriation” rather than internalization to describe this complex process. Individuals transform their understanding of, and responsibility for, activities through their own appropriation of the actions (Rogoff, 1995). Through the process of engaging with others in activity, children appropriate, transform and internalize behaviors and their cognitive activity changes forever.

The development of higher-order mental functions through social interaction means an individual's capacity for learning is not static, but dynamic. A child's potential is a constantly shifting area. The fluctuating area incorporates the distance between the current
level of development and the potential level of development a child can demonstrate with the collaborative guidance of an adult or a peer. The region between levels of development is a child's "Zone of Proximal Development" (Vygotsky, 1978).

According to Vygotsky, language and cognition are products of cultural practices. The relationship between language and behavior is so strong that only when children acquire language can they assume responsibility for planning and controlling their actions, thus becoming self-regulated (Luria, 1981). Elementary thinking is based upon words or concepts tied to their direct stimulus field. Under these conditions, children's planning and control of their own behavior are tied to the social context and the more mature adults in their environment. As children develop higher-order thinking skills and the ability to conceptualize words and concepts not based on the immediate context their cognitive structures change. The change adds another dimension to children's thinking process. They come to control their actions, perform trial and error thinking in the absence of objects and transmit information not bound to their immediate context (Luria, 1981).

Diaz, Neal, and Amaya-Williams (1990) summarize how speech becomes a tool of the intellect. First, the child's cognitive operations gain greater flexibility, freedom and independence from the concrete environment. The child uses speech to accomplish certain goals. For example, communicating hunger or the need of attention are goal-oriented needs to communicate. "Although he is interpreted by adults as referring and predicating along with accomplishing other speech acts, to the child speech and action are undifferentiated" (Lee, 1985, p.82). Language begins serving a social function as more capable others help regulate the child's behavior in social settings.

Second, language acquisition helps the child's mental activities and actions become less impulsive. Children are able to reflectively plan their actions. Private speech emerges
as children begin to internalize social speech and take on the regulation of their behavior apart from their environments. When the child names things to guide his actions, he has demonstrated words can represent and guide his actions as well as communicate. Children begin to separate this function from the social uses of speech, using language not only to get things done in the world, but also to represent the world (Lee, 1985, p.83). Speech acts allow not only for a control of environment, but for an increasing mastery over behavior.

Private speech is internalized as inner speech and children are able to plan, control, and execute behaviors. Therefore, speech development moves from social to private, and finally to inner speech (Vygotsky, 1986). Inner speech develops as children accumulate context-bound experiences and use external signs to solve problems. Counting on their fingers and drawing pictures to represent ideas as they talk out loud to themselves or the pretend-play are examples of this phenomenon. A profound change occurs as the external operations turn inward. Now language serves not only the function of communicating with others, but acquires a second, intellectual function, and becomes a psychological tool for structuring thinking. The soundless language for oneself is the concept Vygotsky called "inner speech." Figure 2 illustrates the relationships between speech and self-regulation.
Adult Control
New behaviors are dependent on the adult to plan, execute, and monitor them.

Shared Control
Children now show the capacity to initiate, maintain, or cease action in response to adults' verbalized signals.

Social Speech
Language and activity are shared by the adult and the child in social dialogue.

Self Control
Children have the ability to perform the action in the absence of the adult. The action is still connected to the adults' verbal directions and is organized in a rigid stimulus response connection.

Private Speech
Its origins are in the caregiver's verbal commands and directives. The child's speech takes on a planning and guiding function.

Internalization through Transformation

Self Regulation
The new action is now guided according to a self-formulated plan in a functional system. The system can be changed and adjusted according to new contexts. Children begin to use signs and tools in their environment to organize their behavior and attain goals.

Inner Speech
Internalization of private speech to inner speech.

Figure 2: Speech and Cognition in Detail
As children develop inner speech, they develop the ability to control their actions or self-regulate their behaviors. They begin to form internal cognitive plans of action that are flexible and that allow them to control their environment in new ways. Diaz, Neal, and Amaya-Williams examined the training of private speech in children. Many of the studies they reviewed reflected adults training children to verbalize directions with the aim being to "plant" language that will become internalized and used in a self-regulatory function. Impulsive children were taken through a series of adult modeled language to instructions to whisper the language to themselves. The modeled statements set the goal of the task, described the activity and reminded the child to go slowly and provide feedback (Meichenbaum & Goodman in Diaz et al., 1990).

Generally, the training studies demonstrate the effectiveness of self-instructional strategies in decreasing impulsive responses and in promoting more successful patterns of cognitive performance. Interestingly, were the studies also found the improvement bound to the experimental task, and was not generalized to outside situations. These behaviors showed evidence of self-control, not self-regulation, thus inner speech was not developed. This may be an artifact of the procedures used in the experiments. Usually, the verbal directions were related to the experimental context and consisted of questions adults taught children to ask themselves.

Diaz et al. found most studies have modeled extremely elaborate statements, questions, and monologues, using language that has no resemblance to the spontaneously generated egocentric or private speech. They conducted studies that attempted to address this problem. Diaz et al. designed studies that sought to build on children's spontaneous speech through modeling self-verbalizations. They trained ten children by modeling
self-regulatory language, using labeling and transitional statements and utilizing a control group that participated in sessions with experimenters without the training. They found no effects of self-verbalizations training on the use of private speech.

Diaz et al. propose further study in the social origins of self-regulation through the use of egocentric and private speech. What specific strategies, training techniques, social experiences might promote children’s greater use of self-regulatory language in their cognitive activity? Reading Recovery does not train children in language; rather, teachers utilize language to respond to individual children. Although prompts are used, the goal is not to have children repeat the prompts. Children’s language empowers and informs the interactions, serving as a tool to base teaching decisions. Teachers aim to lead from behind rather than demanding that children internalize their view of how to construct literacy. Children construct their own inner plans of action, or inner speech and in the process become flexible problem solvers to extract meaning from a text.

Writing Development

Writing is not the transcription of speech; rather, it is a model of our speech. It has a profound influence on development because it makes thinking more explicit, the use of symbols more deliberate, and makes children aware of the elements of language (Bordova & Leong, 1996). Cognitive processes and structures are transformed significantly by the acquisition of our best recognized cultural and intellectual tool - namely, writing (Olson, 1995).
Children learn a model for thinking about speech and language through writing.

According to Clay (1991) a child is learning to write, he/she must:

1) attend very closely to features of letters
2) construct their own words, letter by letter
3) direct attention to special concepts
4) work within the order and sequence constraints of print
5) break down the task to its smallest segments while at the same time synthesizing them into words and sentences
6) engage in their own form of segmenting sounds in words in order to write them

Constructivist Perspectives on Writing Development

A traditional view of literacy defines reading and writing as cognitively separate behaviors that may be reduced to isolated transferable skills that must be taught. Constructivist perspectives shift understandings away from this limiting view. Rather, literacy acquisition is understood as a process of apprenticeship occurring through guided participation (Rogoff, 1990). Children learn the symbolic and representational systems of their culture in social activities with more expert members of the community, teachers, parents, or even peers.

Writing is a complex process, one involving the orchestration of many skills. Essentially, when children learn to read and write, they are transforming a complex system of symbolic representation to encompass written language. Young children become inventive users of gestures, pictures, spoken words, and print in order to mediate or represent the world around them (Dyson, 1990; Vygotsky, 1986). The development of these representational systems originates in the interactions of the child with the particular
sociocultural context. The acquisition of oral language is one of the first symbol systems children acquire. Olson (1995) argues that writing adds a new type of structure to the world and coming to use that structure helps children learn new ways for thinking about language and speech. It provides a conceptual model for our speech (Olson, 1995).

According to Luria, children begin to master the purpose of written speech long before they actually learn to write. He found three-year-olds began to use scribbles to help them remember something or to label an object. Even though the scribbles contained no real letters, the preschoolers gave them meaning and could remember them several days later. During this process, children built up new complex cultural forms of representation through successive transformations (Luria, 1979). Other studies (Clay, 1975; Harste, Woodward, & Burke, 1984) confirm the inventive nature of children's early use of symbolic systems and find links to their cultural context.

Around the age of five or six, children become capable of using notation systems, identified by Vygotsky as second order symbol systems (Vygotsky, 1978). This means that written language consists of a system of signs that designate the sound and words of spoken language, which, in turn, are signs for real entities and relations. Gradually this intermediate link, spoken language, disappears, and written language is converted into a system of signs that directly symbolizes the entities and relations between them. (p.106)

Children use one type of symbol to represent another symbol. For example, for children, the written word *no* begins to correspond to the spoken word *no*. Gradually, the child can begin to use the word *no* in writing without a contextual link, referring only to other symbols. According to Bruner, this transformation represents the acquisition of symbolic representation (Bruner, 1973), and the ability to use sign-sign relationships over sign-object relationships (Wertsch, 1985). The written symbolic representational system
has a profound influence on development because it makes thinking more explicit, the use of symbols more deliberate, and makes the child more aware of the elements of language.

**Constructing Inner Control**

Constructivist perspectives on literacy are centered on the controlling influence of social context on children’s learning. Marie Clay’s (Clay, 1991a) theory describes how children use opportunities in their social context to construct inner control over literacy behaviors. Clay’s theory moves beyond an isolated view of “in the head” cognitive information processing by the isolated learner or social views that choose to ignore the mental operations that take place while learners think. In the end it is the children who learn to actively integrate their experiences and the parent or teacher is powerless to do more than contribute to this active construction completed by the learner (Clay, 1991b., p. 274)

Clay examines literacy acquisition from a cognitive view of literacy in a developmental perspective. “Developmental” indicates an approach which looks at active learners changing over time within their contexts (Clay, 1991a). Clay’s extensive research (Clay, 1982) in classrooms observing young readers and writers grounds her hypothesis that out of early reading and writing experiences children create a network system of competencies which empower subsequent independent literacy learning. Learning generates further learning making the process generic. The goal of early literacy instruction is for children to develop a self-extending system that includes the internalized subroutines or mental operations referred to as “strategies”. Children then learn from each successive encounter with written language by engaging in problem solving a text using their internalized strategies (Clay, 1991a).
The networks of information or programs for action that children internalize may be referred to as subroutines. Luria's explanation of the functional organization of the brain illuminates how different parts or units of the brain control motor movement, visual perception, and auditory perception (Luria, 1970). When the reticular system, responsible for arousal and attention, engages the units of the brain described by Luria (1970), subroutines begin to form. These subroutines represent new behaviors like the complex visual and motor behaviors that must be orchestrated for children to learn how to write.

Initially, the child is learning not only the action, but how to coordinate the segments of the action, how to store or remember and how to call up the action when needed. Evidence of this process can be observed in the slow deliberate actions of children as they learn to write. This slow thinking or processing requires a great deal of attention as the cognitive networks are being formed. The stares into the air as children move their lips and say a word they are struggling to write specifically illustrate this phenomenon. As children gain experience utilizing actions which are at first slow and laborious, a transformation takes place. The action becomes automatic, fluent, and flexible, indicating the creation of subroutines. Subsequently, the precious attention the child committed to the formation of the subroutine, if freed up for new learning and the regulation of the action, is deferred to another part of the brain (Clay, 1991a).

As children learn to write, they must attend and orchestrate the serial order of written language and the hierarchical order, that is the discourse, sentence, word, and letter levels of their language. Further, they must develop the networks of information and subsystems that power generic learning. Proponents of writing process curriculum (Calkins, 1994; Graves, 1976) address the social origins of learning, but fail to recognize that children must acquire the representational system through a process that involves
sequenced action and cognitive activity. Clay's description of developing inner control sheds light on the acquisition of writing not only from a social but also a cognitive standpoint. Writing process pedagogists have also been criticized for not acknowledging the complex hierarchical social relationships of classrooms (Delpit, 1988), a point discussed in the next section.

Expanding the Constructivist Perspective

Children develop inner speech or self-regulatory capacities through social interaction. Therefore, the social context in which those capacities develop must be considered when attempting to describe how children develop as writers. Dyson's extensive ethnographic research in diverse classrooms illustrates that children's texts are not only mediational tools, but also ideological material (Dyson, 1989; Dyson, 1993). Children's differentiation of writing possibilities is linked to their differentiation of social possibilities, of who and how they can be themselves. Dyson (1995) contends that a social constructivist view of literacy highlights enacted social relationships, but fails to reveal the hierarchical nature of those relationships. When children write in the classroom, their decisions of what and how to write are affected by how they have defined themselves as writers in that context. A young child I observed recently refused to sit with his friends during journal writing in his first-grade classroom. He sat alone at a table and drew pictures. His friends were busy writing and telling stories about an upcoming Halloween party. Although the teacher encouraged and praised all of his approximations, nudging him to begin to write more, he resisted. The power of the peer relationships in the classroom and his view of himself as a "non-writer" were affecting his learning.

Dyson utilizes Bakhtin’s (1981) dialogism to explain that any use of language by a person is dynamically situated within both an interactionally and ideologically complex
world. Children’s perceived place in social situations, including the classroom, influence thinking and shape language to communicate inner meanings.

Bakhtin, a Russian literary theorist who specialized in the analysis of language, sought to overcome the sterile dichotomy of form and content in the study of language. He analyzed ideologies through a new science of language called “translinguistics” (Tzvetan, 1988). Bakhtin’s theory of language is based on dialogism, and the intertextual dimensions of language use. He proposes that word meanings of a given discourse system of a culture are linked with prior discourses of that culture, creating a web of relationships with the past, present and future. The language users situate themselves in this web. Entering into a dialogue represent negotiating a social voice and genre appropriate for the given context that best represent inner meanings (i.e., telling a joke, teaching a lesson, preaching a sermon). Inner speech, as defined by Vygotsky (1986) and extended by Bakhtin, consists of assimilated social discourse. Inner speech consists of dialogues connecting an utterance, or an idea unit, in a particular context to formal languages, social languages, or speech genres.

James Gee (1990) sharpens the view constructed by Dyson, by proposing a theory of discourses and literacies. Literacy must be defined, according to Gee, in terms of Primary and Secondary Discourses. Embedded in Primary and Secondary Discourses are overt and tacit theories about social relationships, accepted ways of behaving and language use in specific situations. Therefore one cannot divorce one’s theories of the world from language. Theories are communicated tacitly or overtly by what is said and done, communicating meaning verbally and through nonverbal means.

Primary Discourses encompass enculturation and serve as a framework or base for the use of language, behavior values and beliefs that give shape to individual experiences.
"It is important to realize that even among speakers of English there are socioculturally different Primary Discourses, and that these Discourses use language differently. For example, many lower socioeconomic black children use English within their Primary Discourse to make sense of their experience differently than do middle-class children" (Gee, 1990, p. 151). The Primary Discourse is acquired through exposure to models in the natural, meaningful and functional settings of the home and community.

Secondary Discourses are beyond the Primary Discourse of the individual. Culturally defined by institutions like schools, work places, stores, government offices, businesses and churches, they are learned after the Primary Discourse. Access to and success within these secondary Discourse systems requires learning, which Gee separates from acquisition. Direct teaching utilizing the primary discourse to make sense of the secondary Discourse occurs through a "meta-level knowledge." This is consistent with Delpit's (1988) call for explicit teaching of main-stream literacy practices with culturally diverse classrooms. Gee (1990) describes the use of discourse from an insider, outsider perspective of which students may or not be conscious. Dyson illustrates these perspectives as she describes the behavior of urban children as they write. The social relationships of the classroom and the hierarchical social relationship manifests itself in children's writing and in Dyson's (1993) study as children planned author's theater productions based on their writing.

Gee (1990) defines literacy as "mastery of, or fluent control over, a secondary Discourse. Therefore, literacy is always plural: literacies (there are many of them, since there are many Secondary Discourses, and we all have some and fail to have others)" (Gee, 1990, p. 153). One does not master a discourse until it is acquired, not learned. The acquisition of the Secondary Discourse system of formal schooling is easier for mainstream
students because their Primary Discourse is similar to that of the school. Children whose primary discourse differs from that of the school experience conflict. Gee suggests that teachers support children through natural environments that foster acquisition of the Secondary Discourse of a formal school setting. In addition, teachers need to provide explicit meta-level knowledge of the Discourses. Therefore, the Primary Discourse of the teacher is important. Understanding how Primary and Secondary Discourse systems work enables teachers to include this knowledge in their practical theory of action about writing. Knowledge of discourses helps teachers provide the necessary bridges for all children to acquire literacy in a formal school setting.

The understandings a teacher holds are manifested in their language. Through their Primary Discourse, tacit or overt, teachers communicate to children not the essential isolated skills of reading and writing, but rather teachers are . . . teaching a set of discourse practices, oral and written, connected with the standard dialect of English. More importantly she is apprenticing students to dominant, school-based social practices. Language and literacy acquisition are a form of socialization, in this case socialization into mainstream ways of using language in speech and print, mainstream ways of taking meaning, and of making sense of experience (Gee, 1990, p.67).

As children learn to read and write, they are immersed in overlapping and perhaps conflicting discourse systems. They learn not only culturally appropriate ways of thinking at home and in school, but also who they can be in the community (Dyson, 1995).

As children become literate through the creation of subsystems or mental plans of action, they are also negotiating the socially complex world of the classroom and who they can be as a literate person. Therefore in terms of writing development, social possibilities represent writing possibilities (Dyson, 1995).
Scaffolded Interactions

The development of self regulation in children through interaction with more capable others in their zone of proximal development is characterized as “scaffolding.” Wood, Bruner, and Ross (1976) first coined the term after studying mothers and children constructing wooden puzzles together. They found children who had very little knowledge of the task were initially able to complete the puzzle with the help or assistance of the adult. Scaffolding was proposed as a term to describe the tutorial process where a more capable other helps somebody who is less expert at solving a specific problem that is beyond his/her capabilities if unassisted. The function of the more capable other or the adult in their study included recruitment, reduction in degrees of freedom, direction maintenance, marking critical features, frustration control, and demonstration. Greenfield asserted scaffolding does not simplify the task through adult guidance, but rather holds the task constant, while simplifying the child’s role by means of graduated assistance for the adult (as cited in Tharp & Gallimore, 1988).

Tharp and Gallimore, contend that while the concept of scaffolding is important to the study of child development, the field has advanced to a point where a more differentiated definition is needed: “Scaffolding suggests that the principal variation in adult actions are matters of quantity -- how high the scaffold stands, how many levels of supports, how long it is kept in place. But many of the acts of the adult in assisting the child are qualitatively different from one another” (Tharp & Gallimore, 1988, p. 34). Tharp and Gallimore maintain that scaffolding as it occurs in the natural setting of home differs greatly from the possibilities of a school setting for instruction in a child’s zone of proximal development. Their argument is well grounded in the findings of their own studies. They developed pedagogical implications of constructivist principals in literacy learning while
working with the Kamehameha Elementary Education Program (KEEP) in Hawaii. They adapted the notion of scaffolding while interacting in children’s Zone of Proximal Development to mean assisted performance. “Assisted performance defines what a child can do with help, with the support of the environment, of other, and of the self” (p. 30). Proposing that assisted performance encompasses more than logical problem solving, it is asserted that for any domain of skill, a Zone of Proximal Development may be created. There is no single zone for each individual, and assistance may vary qualitatively depending on the complexity and nature of the task and the student’s present level of development.

Tharp and Gallimore (1991) assert teaching must be redefined as assisted performance; teaching occurs when performance is achieved with assistance. They elaborate on the nature of assisted performance as defined by behavioral and cognitive science.

1) Modeling: offering behavior for imitation.

2) Feeding back: providing information on performance as it compares to a standard.

3) Contingency managing: applying the principals of reinforcement and punishment.

4) Directing: requesting specific action.

5) Questioning: producing a mental operation that the learner cannot or would not produce alone.

6) Explaining: providing explanatory and belief structure.

7) Task structuring: chunking, segregating, sequencing, or otherwise structuring a task into or from components.
Tharp and Gallimore (1988) maintain learning to teach utilizing a child's zone of proximal development through assisted performance is a dramatic shift in the nature of teacher-student interaction from recitation and scripted teaching which permeate teaching. Assisted performance in schools is quite different from the natural language encounters that guide children to language acquisition. Therefore, questions begin to form as to what scaffolding looks like and how it can be achieved in the classroom.

Scaffolding as Instruction

Bliss, Askew and Macrae (1996) studied the difficulty of implementing the concept of scaffolding in the classroom. Through a qualitative study of four teachers, they documented the teacher's ability to "talk scaffolding," but at the same time the relative absence of scaffolding in their instructional interactions. This conclusion led to new questions of how much time is required to internalize, own and use new approaches involving scaffolding strategies. Teachers participating in the study of scaffolding initially demonstrated no aspects of what the literature defines as scaffolded instruction. Through their interactions with the teachers during this qualitative study a small percentage, twenty-two percent, of the interactions began to take on the characteristics of scaffolding.

These conclusions are challenged however by another study linking Vygotsky's concept of Zone of Proximal Development and writing conducted longitudinally by Steward (1995). In an effort to see if Vygotsky's concept of Zone of Proximal Development was evidenced as children made progress, she observed twelve children's writing over half of a school year through observing their interactions with their teachers and peers during writing conferences. The teacher believed strongly in teaching writing according to a process approach and was very analytical in his teaching. He took daily narrative records
of his students and reflected on them to plan subsequent instruction. Steward (1995) found that the teacher and peers help to shift the kindergarten children from object-regulated, other-regulated, or self-regulated in terms of uses of writing through their comments and questioning during writing conferences and throughout the school day (Steward, 1995).

The teachers in Bliss et al. lacked strong support systems or the use of systematic observation as a source of information to fuel their instructional decisions of individual children. Scaffolding instruction is beyond any teaching script and may be a function of a number of two characteristics found in the literature, the student-teacher ratio and the expertise of the teachers. Both of these characteristics are found in the Reading Recovery training model (Clay, 1993b; DeFord et al., 1991; Lyons et al., 1993a), and studies have already documented how the interactions resemble scaffolding (DeFord et al., 1991; Hobsbaum et al., 1996).

**Scaffolding and Reading Recovery**

Although when designing the Reading Recovery model Clay did not incorporate Vygotsky's Zone of Proximal Development into the description of the instructional interaction, many parallels exist (Clay & Cazden, 1990). The intensive one to one instructional setting of Reading Recovery aims to help children construct a self-improving system of knowledge and strategies that power literacy acquisition. Cazden (1992), characterizes Reading Recovery simply as “active teachers and active learners.” Through extensive teacher education rooted in constructivist principals that begin during a year of post-graduate work and continues as they continue to work with children, teachers learn
how to successfully scaffold children’s literacy learning. Teachers pass more and more control to the child and push the child, gently but consistently, into independent, constructive activity (Clay & Cazden, 1990).

DeFord (1994) addressed the nature of time use and shared responsibility in the writing portion of Reading Recovery as indicated by independent and jointly constructed writing within lessons. Through engaging in teacher supported problem solving efforts, high-progress children took progressively more responsibility for writing across their instructional program. Teachers were found to support children when necessary, asking questions and prompting for problem solving, thus extending the child’s cutting edge of development. The teachers actively sought to shift control of the writing and reading events in lessons from shared control to self-control, characteristics of scaffolded instruction.

Hobsbaum, Peters, and Sylva (1996) directly addressed the issue of the relationship between Reading Recovery teacher-student interactions and scaffolding through a longitudinal study of seven Reading Recovery teachers and seventeen students in England. Patterns of interactions in terms of structure and talk cycles were identified from careful analysis of transcripts examining teacher-child moves in relation to one another. They identified talk cycles initially focusing on joint sentence or story generation. Then, the talk cycles centered on word construction with a focus, transition, focus, transition. Change over time was categorized into three phases. The phases occurred within the talk cycles as the teacher structured the internal setting so that the child developed increasingly more complex actions independently. Children primarily took control of:

1) Strategy Monitoring: holding the message in working memory and rereading independently in order to locate the next move.
2) Whole word recall: identifying the word and writing immediately without searching or using phonetic cues, i.e., applies acquired sight vocabulary.

3) Surface feature control: self-regulates spacing and handwriting and shows understanding of punctuation.

4) Phonemic segmentation: where a phoneme is articulated, the child goes straight to the written letter without the need to name that letter before or in the process of writing it.

The study highlighted the difference between scaffolding one task, for example a wooden puzzle in the Wood, Bruner, and Ross (1976) study as opposed to literacy behaviors. Literacy behaviors in school settings are subject to growing curricular demands and consist of a network of behaviors that interweave to form what counts as literacy for the particular social setting. Hobsbaum et al. found Reading Recovery teachers allow children to take control of parts of the entire writing task, but the teacher retains the responsibility for extending the difficulty of the task. This requires a detailed understanding of the child's history, the immediate task, and the teaching strategies needed to move forward. Daily lessons and careful record keeping allow Reading Recovery teachers to observe and record the child's behaviors in order to build a model of the child, and structure the next challenge. Hobsbaum et al. conclude that although scaffolding is successful in a one-on-one intervention, it is less useful in understanding ordinary classroom teaching (Hobsbaum et al., 1996).

Wong, Groth, and O'Flahavan (1995), attempted to use a sociocultural framework to analyze five Reading Recovery teachers' interactions with children in two contexts: familiar reading and reading new stories. The study found that teachers changed the nature of their "scaffolding" comments as a function of text familiarity. They define scaffolding
as "a metaphor to describe ways that a tutor assisted a child during a problem solving activity" (p.17) They characterized teacher-student interactions by using five categories for teacher behavior:

1) Telling - to provide the word or explanation
2) Modeling - to explicitly demonstrate and act
3) Prompting - to focus attention on visual, structural, or meaning cues available in the text
4) Coaching - to take the reader outside the reading act to focus on how the student performs or responds; and
5) Discussing - to talk about the text in a way that focuses attention on the meaning of the story

Wong, et al. concluded the instructional interaction found in the lessons do have direct implications for classroom teachers. This contradicts Hobsbaum et al. and Bliss, Askew, and Macrae (1996), who contend scaffolding may not be feasible for classroom teaching because of the necessity for detailed knowledge concerning the learner and the subject matter. Clearly, more information is needed to understand how scaffolding in Reading Recovery may or may not be an effective teaching method for one-on-one interactions.

**Reconstructing Scaffolded Instruction**

Meadows (1993), a cognitive psychologist, explains when skills are first learned or developed they are often tied to the original situation of use and are context-dependent. Although the term “transfer” implies an “in the head” view of knowledge, acknowledging multiple perspectives on knowledge and learning helps give shape to difficulties students...
may have in reconstructing learning from one context to another. Young children, especially those experiencing difficulty in school and perceived as low in ability, were shown to be reluctant to transfer or reconstruct new understandings to new contexts.

The children who experience difficulty with the transfer of knowledge are the type of children receiving Reading Recovery as an intervention. Follow-up studies of Reading Recovery document that children are able to transfer their literacy knowledge from the context of Reading Recovery to the classroom context (Lyons, Pinnell, & DeFord, 1993b).

Two studies document how children negotiate the meanings created in Reading Recovery and the regular classroom. White (1992) found that children construct links between the classroom and Reading Recovery lessons as they define who they are as readers and writers.

Henry’s (1996) preliminary evidence from a study of two boys in Reading Recovery documents how children redefine what reading is through their interactions with the teacher in Reading Recovery lessons. Initially their reading knowledge was context bound and task-related within the two separate contexts of the classroom and Reading Recovery. The children were shown to hypothesize different constructions about what reading is. Reading as “remembering” and “making it up” are two examples. Finally, redefining reading as a problem solving process to construct meaning from text enabled the students to reconstruct the knowledge from Reading Recovery to the classroom.

Conclusion

Clearly, the literature supports the instructional technique termed “scaffolding” as an effective instructional technique in the context of Reading Recovery lessons. Studies document scaffolding techniques for instruction prove useful in the contexts of the studies,
but children had difficulty generalizing the behaviors to other contexts. Diaz et al. (1990) assert that new behaviors did not generalize to other contexts because the experimenters imposed their language onto the children who were involved in the study in an attempt to help them become self-regulatory. Vygotsky’s theory of semiotic mediation and the development of inner speech help frame the assertion that in order to help children become self-regulatory, their spontaneously generated speech must be utilized. Reading Recovery does just this. Therefore, it is appropriate to study how children demonstrate their ability to be self-regulated in different contexts, outside of Reading Recovery.
CHAPTER 3
METHODS AND PROCEDURES

Introduction

One appropriate application of qualitative inquiry documents theories in action (Patton, 1990). According to Marshall and Rossman (1995), descriptive qualitative research may document the salient behaviors, structures and processes that occur in a phenomenon. Theoretically, the focus of this study is on the social origins of complex mental processes involved in literacy acquisition and the nature of the interactions that support the internalization or participatory appropriation (Rogoff, 1995) of these processes, termed in the literature as “apprenticeship” (Rogoff, 1990) or “scaffolding” (Wood et al., 1976). Rather than reducing the complexities of literacy to isolated observable behaviors, the study sought to observe the phenomenon of scaffolding in action during writing events. Understanding how children’s observable writing behaviors illustrate these theoretical constructs further narrowed the inquiry. Two students in the Reading Recovery program were closely followed during twelve weeks of instruction to address the research questions.

This study adopted an exploratory stance by utilizing multiple perspectives. It not only examined in detail the Reading Recovery teacher-student interactions, but also looked at how children reconstruct knowledge from these interactions. Rogoff (1995) uses the term “participatory appropriation” to refer to the process by which individuals transform their understanding of and responsibility for activities through their own participation.
This study focused on two children in two different contexts while they participated in Reading Recovery lessons, allowing for a broader perspective of the learner as shifts in behaviors took place.

Patton (1990) discusses the value of using multiple methods in research and evaluation. Different methods produce different information. In order to address the research questions posed, a mixed methodology was most appropriate. The extent to which a qualitative study is inductive or deductive is on a continuum and responsive to real-world conditions of study in schools. Qualitative inquiry allowed the complexities of teaching and learning to emerge.

The procedures for site selection, access, selection of subjects are described first. Data collection procedures follow, accompanied by detailed descriptions of each procedure. How the data were analyzed a timeline for the study concluded the chapter.

**Site Selection and Access**

A large urban school district that has participated in the Reading Recovery program for over 11 years was the site for the study. After the school district gave its approval, the Reading Recovery Teacher Leader in charge of the program for the district assisted in selecting eight experienced teachers whom she considered "expert" teachers. The expert opinion of the Teacher Leader manifested "intensity sampling" that provided information-rich cases that demonstrate a phenomenon (Patton, 1990). Expert teachers demonstrate the ability to discontinue or exit children from the program in shorter periods of time, fewer than sixty or twelve weeks of lessons. Effective teaching conducted by expert teachers offers a unique opportunity to examine the power of scaffolded instruction in an intense setting.
One of the eight teachers was selected after preliminary contacts by phone or in person regarding willingness to participate. Also key to the site selection and access process was the potential for classroom teachers in the building to allow entry into their classroom to observe children during independent writing. This proved to be difficult. Some Reading Recovery teachers did not think opportunities for independent writing were part of the teacher's weekly classroom routine, or access to the room for observation would prove difficult. After contacting four of the eight expert teachers, a site was selected.

The classroom teacher was participating in The Ohio State University Early Literacy Learning Initiative (ELLI), and was in the process of implementing a framework that included daily opportunities to write independently. The children in this classroom were accustomed to being videotaped and to having visitors in their classroom. All students in this classroom had signed waivers from their parents allowing for videotaping for research purposes of ELLI research, although the study would focus on only two of the children. Additionally, the classroom teacher was training a student teacher who also agreed to participate in the study when she was conducting independent writing sessions. Appendix A contains a sample letter of consent that all school personnel signed.

**Subjects**

From a population of approximately 70 first-grade children in three classrooms in an urban elementary school, two children were selected. Each student was in the lowest twenty percent of their class as indicated by the standard Title One screening procedures adopted by the school district in compliance with federal guidelines. A Reading Recovery teacher selects four children based on six subtests of the Observation Survey; Text
Reading; Letter Identification; a sight Word Test; Concepts About Print; Writing Vocabulary; and a measure of phonemic awareness called Hearing Sounds in Words.

Each Reading Recovery Teacher works with four children in half a school day and is assigned to other duties for the remainder of the school day. The two children selected were in the same classroom. The classroom teacher agreed to participate in the study. The classroom and Reading Recovery teachers were held constant in order to illuminate individual differences between children.

I informed the children as to the purpose of the study, the researcher's presence and their role in the study and offered them an opportunity to decline to participate without penalty. I then contacted their parents and gave them an opportunity to ask questions or decline for their child's participation in the study without penalty. I obtained written approval from the school district and the study was approved through the Human Subjects Review of The Ohio State University. Appendix A contains the sample letter of consent signed by both parents. Figure 3 illustrates the relationships between the participants.
Figure 3: Participant Relationship

According to Glensne and Peshkin (1992), participant observation ranges across a continuum from mostly observation to mostly participation. The frame utilized in the classroom and Reading Recovery setting was best categorized as "observer as participant." This role best suited my personal characteristics as a researcher and the nature of the research questions. An "Observer as Participant" is the descriptive term describing the researcher primarily as an observer, but some interaction with the study participants takes place.

Reading Recovery lessons are one-on-one interactions; therefore, my participation was limited to observation. On the continuum, my role in this setting was more observer. A few times the child or the teacher looked at me and encouraged my participation by addressing comment to me, but overall, the teacher and the child pretended I was not there.
During independent writing or journal writing the children in the classroom sought out my attention to listen to their writing many times although I explained my presence initially as a passive observer. I interacted with the other children as long as my ability to observe the children participating in the study was not threatened. If they requested my attention, I would say, "I have to write now, I'll listen later," and then made sure I got back to them before I left at the end of the day. The children came to regard me as part of their routine and when I entered the classroom after the study was complete, they asked, "Are we gonna write in our journals?" and the teacher told me, "You’re not a guest anymore, you’re part of the room."

As a researcher, interaction with the teachers consisted of participation in their lunch discussions. Classified as "informal interviews," I participated in discussions regarding the children’s progress in the classroom. I did not comment on the teacher’s instructional decisions or recommend any course of action for the students. Overall, I attempted to observe and describe the phenomenon. However, by the nature of my presence in the study, interviewing and collecting data from participants, I too was part of the study. Due to the varying forms of participation my individual perspective was reflected in the results.

**Data Collection**

In order to address changes over time in children’s writing twelve weeks of lessons was defined as an appropriate time frame to maximize the potential for information regarding shifts in behavior. Reading Recovery programs average twelve to fifteen weeks, but do not usually surpass twenty weeks. Data collection began during the first lesson of the Reading Recovery program. The initial two weeks of Reading Recovery programs, termed "Roaming Around the Known" (Clay, 1993b) were not included in the data.
collection as permission for the study was not granted at that time. However written records were obtained to document baseline information about the children.

This study first describes the data collected for each research question. Then it describes each data collection procedure, and finally presents a week-by-week break down of data collected.

1. What writing behaviors shift from shared to self-control in the instructional interactions during the writing portion of Reading Recovery lessons?

Data Collection Procedures:

1. Videotaping lessons once a week
2. Audiotaping lessons twice a week
3. Collecting writing books from lessons
4. Collecting lesson records
5. Pre and Post Observation Survey Results
6. Teacher and student interviews

2. How do children's understandings of writing shift over time in relation to their new experiences in Reading Recovery as evidenced in their independent writing behaviors?

a) What evidence of the self-controlled behaviors learned in Reading Recovery can be found in the self-regulated behaviors of children's independent writing?

b) How are the behaviors similar to or different from those demonstrated in the context of the Reading Recovery lesson?
Data Collection Procedures:

1. Student Interviews
2. Six writing samples
3. Videotaping independent writing episodes once a week in the first grade classroom
4. Collecting independent writing from classroom journals
5. Teacher and student interviews
6. Parent surveys

The two students shared the same Reading Recovery teacher and classroom teacher. Therefore, the data were collected in two contexts: the Reading Recovery room during lessons, the classroom during journal writing, outside interviews and writing samples conducted by the researcher. The selection procedures for the two students were addressed in the sections titled "Site Selection," "Access," and "Subjects" in this study.

Figure 4 illustrates the relationships between the researcher and the contexts of the study.

Figure 4: Two Children Observed in Two Contexts
Table 1 summarizes the data collection procedures for each student throughout the study.

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Table 1: Data Collection Procedures

Observation Survey

During the study, student scores on An Observation Survey of Early Literacy Achievement (Clay, 1993a) were obtained in addition to the written summary. The summary further elaborates the individual strengths and needs of the children as assessed by the Reading Recovery Teacher. The instrument involves six measures of early literacy behaviors. The study also relied on an optional writing sample component used in the writing interview portion.

The Observation Survey provides opportunities to observe children responding to standardized tasks. The tasks have the "qualities of sound assessment instruments with
reliabilities and validities and discrimination indices established in research studies" (Clay, 1993a, p. 8). The standardized tasks include: Running Records of Text Reading; Letter Identification; Concepts About Print; Word Test; Writing Vocabulary; Hearing Sounds in Words or Dictation; and Text Reading.

After twelve weeks of lessons an alternate form of the Observation Survey was administered to each student by the researcher. Discontinuing means the student is able to function in the classroom at average reading ability and displays the behaviors of a self-extending system that powers further literacy learning. Based on the testing that I conducted a decision was made to discontinue Justin. However, Champelle needed to continue in the program for a week and was tested two weeks later and then discontinued from the program. Champelle was discontinued from the program after the Observation Survey was administered.

Teacher Interviews

Two kinds of interviews with the teachers took place during the study: informal interviews and formal interviews. The informal interview took place during naturally occurring interactions with the teachers. Weekly, we talked about the children during lunch time, and when I left the room I took brief notes as to the content of the interviews. When I left the room. Additionally, the classroom teacher participated in two formal interviews. During one of these interviews the student teacher was present as well as the Reading Recovery teacher. Each contributed to the interview. The Reading Recovery teacher was interviewed after the students were exited from the program. All formal interviews were audiotaped and transcribed. See Appendix B for a complete set of teacher interview questions used during the study.
Student Interviews

Students were interviewed utilizing an adaptation of the writing interview constructed by Rhodes (1988) (Rhodes & Dudley-Marling, 1989). The same interview questions were administered three times throughout the study to demonstrate any shifts in understanding that occurred. The interviews were audiotaped. See Appendix B for the adapted interview.

Writing Samples

During the first three weeks and last three weeks of data collection a writing sample was produced by each student outside of the classroom. The student was audiotaped in order to capture the talk while writing; however, one student did not speak at all while writing outside the classroom. The researcher used field notes to capture the behaviors as the child wrote. Students were asked to write a story about their family, their classroom or their friends. See Appendix C for procedures used during the writing sample. The writing samples were rated utilizing an adapted form of an early writing assessment tool (Clay, 1993, p. 57). The adapted form may be found in Appendix D.

Video and Audio Tapes/Observations

Videotaping was used to document nonverbal behavior and communication such as facial expressions, body language and emotions (Marshall & Rossman, 1995). In addition, video taping allowed a triangulation (Patton, 1990) of data to occur between the lesson record, the writing book and the video, further strengthening the evidence of scaffolded interactions between the student and teacher.

Every Wednesday the Reading Recovery lessons were videotaped. Every Wednesday and Thursday the children were video or audiotaped during independent
writing. The first four independent writing sessions were audiotaped because of lack of appropriate equipment. A wireless microphone was attached to the students to capture their comments when they were observed.

**Audio Tapes of Lessons**

The teacher audiotaped three lessons a week, including the day of the videotaping. This provided a backup in case of equipment failure. The purpose of audiotaping the prior and subsequent lessons was to give the researcher more information regarding instructional interactions if needed during the data analysis phase of the study. This also verified the validity of the videotaping sample.

**Lesson Records and Writing Books**

The researcher photocopied all Reading Recovery lesson records and collected the actual writing pages for the video taped lessons because photocopies do not allow the analysis of approximations the students made that were covered with white post-it tape. The records reflect the strategic behaviors the students exhibited from the perspective of the teacher. They also reflect what element of the writing task the teacher and/or the student completed as they shared the task. The entire twelve weeks of lesson records were collected.

**Collection of Independent Writing/Journal from the Classroom**

Once a week the students were observed during independent writing time in the classroom and audio or videotaped. This activity is conventionally called “journals.” Children’s talk and behaviors were documented through audio and video tapes and field notes. In addition, the students’ writing in journals were copied and collected. The journals were rated utilizing an adapted form of an early writing assessment tool (Clay, 1993, pg. 57). A six point scale in three categories was utilized to rate children’s early
writing. The first category was language level or how the child represented their message using letters words and sentences. The second category rated the complexity of the message or the sentence structure and coherency of the text. The final category rated directional concepts of written language. The same tool was utilized to score the writing samples.

Parent Surveys

The parents of each student participating in the study were sent a survey regarding their observations of the child at home throughout the Reading Recovery program. A sample survey is located in Appendix B. Only one parent responded to the survey.

Data Analysis

Credibility

As a classroom teacher, I became interested in children's writing development and began to ask questions about how children develop as writers and what behaviors they learn that support or hinder their further learning. Reading Recovery training as a graduate student and participating in a writing study with a faculty member during my first year of doctoral studies increased the complexities of my questions. The social nature of learning became a focus of my studies during my second year and I began to consider implications for instruction. During the study, I was training to be a university trainer for Reading Recovery. I must admit that my views of Reading Recovery as a strong instructional program for the lowest 20% of children did influence my perspective. However, the doctoral program has also trained me to think critically and look for alternate explanations for observed phenomena.
Throughout the study, I sought the advice of a fellow doctoral student who served as a colleague and a peer reviewer to facilitate thinking about alternate explanations for the data. I was worried because of my participation in the Reading Recovery training class that I might begin to focus solely on constructs as they relate to the program. We discussed the possible explanations for the behaviors I observed as well as methods of analysis that might help to go beyond my Reading Recovery perspective. This helped me test rival explanations for the data I was collecting (Patton, 1990), which enhanced the quality of analysis.

Phases of Data Analysis

I analyzed the data in three distinct phases.

Phase I - Data analysis of Reading Recovery writing interactions and shifts over time in behaviors

Phase II - Data Analysis of the classroom writing events, student interviews, and independent writing samples.

Phase III - Report Results

The first phase addressed the first research question:

1. What writing behaviors shift from shared to self-control in the instructional interactions during the writing portion of Reading Recovery lessons?

Data Collection Procedures:

1. Videotaping lessons once a week
3. Collecting writing book from lessons
4. Collecting lesson records
5. Pre and post Observation Survey results
6. Teacher and student interviews
Quantitative measures were scored according to standards developed in Clay’s *An Observation Survey of Early Literacy Achievement* (1993a). This source provides scoring procedures for the six measures of the Observation Survey.

Throughout the study, I created analytical files to manage data and a filing system that labeled and organized data as it was collected. While I collected the data, I also transcribed the videotapes and interviews. A sample transcript is in Chapter four of this study.

I conducted an inductive content analysis (Patton, 1990) identifying the patterns and categories as they emerged. Rival organizational themes were considered while reviewing the transcripts of the Reading Recovery lessons. These rival organizational themes were discussed with other Reading Recovery teachers and a colleague outside of Reading Recovery. For example, the pattern of Word Analysis was troublesome because there were so many types of word analyses conducted throughout the lessons. Initially, I tried to code them differently, but then I found grouping them together was more productive in order to view shifts in control.

Codes reflected the language utilized by the children and teacher in the study through a typology that described the program in a manner consistent with the teacher’s, student’s, and researcher’s perspective. The typologies represent the behaviors the child demonstrated in the lessons and the level of support the child required to complete the writing task.

Coding was completed for both sets of lessons, teachers in the study reviewed a sample lesson. Agreement of over 98% was reached by each teacher. This supports the credibility of the codes and serves as a form of triangulation (Patton, 1990).
Story Generation (SG): The composing of one or more sentences to write.

Transitions (T): How the writer generates the next word to be written. Three different patterns emerged from the data: remembering (R), rereading (RR), rereading silently (RRS).

Directionality (D): The conventions of the English Language regarding recording text. Three behaviors were found. The first word of a story (FW). The spaces (S) between words, and return sweep (RS) at the end of each line of text.

Word (W, or the actual word): If the child, the teacher or a combination of both, wrote the word without analyzing it into smaller units of syllables, onset, rhyme, or phonemes, it is considered a unit. The W is only used if monitoring or correcting a word written as a unit.

Word Analysis (WA): Behaviors in this category include hearing and recording sounds in words, linking known words to new words, and spelling patterns.

Letter Formation (LF): The attention to letter formation as a behavior. The convention of capital and lower case letters is included in this category. If the behavior was not coded then the formation was a close enough approximation for the child to reread the sentence independently according to the judgment of the teacher.

Punctuation (P): Including the appropriate punctuation in the text.

Monitoring (M): Detecting an error in the production of text that would impair the rereading of the text to keep it consistent with the intended message. This code follows the other behaviors coded.

Correcting (C): This is the process of fixing the error after detecting it.
Level of Control

After coding the writing behaviors, codes were then developed for the level of independence each child displayed. I recorded control of the writing behaviors by carat symbols (^) to show the extent to which each participant controlled the behaviors. Because different parts of behaviors in problem solving new words can be controlled at different levels, the highest level of support represented each behavior rather than multiple levels of support. For example the child wrote the word “to” as part of the word “today”. The teacher then wrote the rest of the word for the child. This was coded as shared control even though the child demonstrated independence on part of the word.

When the child self-initiated the behavior without the support or prompting of the teacher, one carat is displayed (^). When the control was shared by the student and the teacher with non-verbal prompting double carats (^^) were coded. Verbal prompting was coded as triple carats (^^^). Verbal prompting means the teacher does not perform any of the writing behavior, but she only prompts to the action that needs to be carried out. If the child self-initiated the behavior and then appealed to the teacher to confirm the correct response and the teacher did so, this was coded as verbal prompting. When the teacher and the student shared the act of recording the actual letters of the words, four carats were displayed (^^^^^). When the teacher was only writing, directly telling or demonstrating four carats (^^^^^) were displayed. Sometimes the teacher phrased the telling as a question, “Is there something wrong?” In this context, the child then knew that something was wrong with the writing; therefore it was not a verbal prompt, but the teacher actually controlled the monitoring. If this questioning was present during right and wrong answers then it would be considered verbal prompting, not telling.
After the writing portion of the Reading Recovery lessons were coded for behaviors and level of control, they were entered into a spreadsheet program that helped sort the behaviors, level of control and dates in order to show how the behaviors shifted over time in relation to control. Results may be found in chapter IV. These results were then transformed into data display charts. Appendix E details the analysis and how the data display charts were created. Each data display chart represents the total number of occurrences of the observable behavior during videotaped lessons. Lessons were videotaped once a week for twelve weeks. Some behaviors occurred more frequently than others. For example, story generation occurred only once per lesson, but monitoring and correcting occurred more than once. The data display charts help illuminate shifts over time in specific behaviors as they were observed.

Phase II

The second and third phase of data analysis addressed the second research question:

2. How do children’s understandings of writing shift over time in relation to their new experiences in Reading Recovery as evidenced in their independent writing behaviors.

   a) What evidence of the self-controlled behaviors learned in Reading Recovery can be found in the self-regulated behaviors of children’s independent writing?

   b) How are the behaviors similar to or different from those demonstrated in the context of the Reading Recovery lesson?

Data Collection Procedures:

1. Student Interviews

2. Seven writing samples holistically scored
3. Classroom observation and field notes during independent writing episodes once a week
4. Collection of independent writing from classroom journal

A content analysis (Patton, 1990) was conducted, utilizing the audio and video tapes and field notes collected during independent writing and the writing sample. A document analysis supplemented the content analysis of the classroom writing events. This established patterns or shifts in understanding in the children displayed in the classroom as evidenced by talk during the process of writing and the writing artifacts. Again a data display chart was constructed. Phase II included a content analysis of the writing interviews and the independent writing samples. After this was completed, the data display charts for each child were examined. This allowed for patterns across the two contexts to be displayed and relationships to become evident, therefore addressing the research questions. The results of the study are reported in Chapter IV of this report.
Research activities involved in this study spanned a nine month timeline. Four categories of research actives occurred over the nine month period. Table 2 describes the research timeline of the study.

<table>
<thead>
<tr>
<th>Time Line</th>
<th>Research Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1996</td>
<td>Proposal Development</td>
</tr>
<tr>
<td>October 1996- January 1997</td>
<td>Site Entry, Collect Data</td>
</tr>
<tr>
<td></td>
<td>Preliminary Data Analysis</td>
</tr>
<tr>
<td>January - March 1997</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>April - May 1997</td>
<td>Report Results</td>
</tr>
</tbody>
</table>

Table 2: Research Timeline
CHAPTER 4
FINDINGS

Introduction

The purpose of this study was to examine how children construct an understanding of writing through scaffolded instruction in one context, Reading Recovery, and then reconstruct those understandings in a new context, their classroom. Two types of children's writings in two different contexts, Reading Recovery lessons and independent writing in the regular classroom, were closely followed for twelve weeks. The observations captured how children's behaviors shifted over time in both contexts. The findings of the study are reported below as they correspond to the following research questions:

1. What writing behaviors shift from shared to self-control in the instructional interactions during the writing portion of Reading Recovery lessons?

2. How does children's understanding of writing shift over time in relation to their new experiences in Reading Recovery as evidenced in their independent writing behaviors?
   a) What evidence of the self-controlled behaviors learned in Reading Recovery can be found in the self-regulated behaviors of children's independent writing?
   b) How are the children's behaviors similar to or different from those demonstrated in the context of the Reading Recovery lesson?

This chapter first describes the children's literacy behaviors prior to the intervention program Reading Recovery. Next, an explanation is provided that depicts through data
display charts (Question 1) how each child’s writing behavior shifted in relation to the scaffolded instruction in Reading Recovery. In response to Question 2a, the chapter explains how the scaffolded writing behaviors found in Reading Recovery shifted in independent writing in the classroom. The nature of those behaviors as children reconstructed or and internalized them to independent writing concludes the chapter (Question 2b). In order to illustrate how the children’s observable writing behaviors shifted over time in two contexts, the data were separated into four phases. Each phase represents three weeks in each context.

Justin and Champelle began first grade in Kate’s classroom. Screening procedures for Title I programs indicated they were in the lowest twenty percent of their first-grade cohort. Eileen, the Reading Recovery teacher, administered the Observation Survey. She then consulted with the children’s classroom teacher, Kate, and determined that both students could benefit from Reading Recovery, the early intervention program. Eileen summarized their emerging literacy behaviors as a basis for beginning Justin and Champelle’s programs. The classroom teacher also provided a summary of each student’s literacy behaviors. These summaries follow.
Champelle

Champelle had varying strengths in terms of literacy upon entry to school. As the following Observation Survey results indicate (see Table 3), her kindergarten experiences allowed her to form some initial concepts of letters and words and how they work.

<table>
<thead>
<tr>
<th>Standardized Task</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running Record of Text Reading</td>
<td>A</td>
</tr>
<tr>
<td>Letter Identification</td>
<td>53</td>
</tr>
<tr>
<td>Word Test</td>
<td>0</td>
</tr>
<tr>
<td>Concepts About Print</td>
<td>9</td>
</tr>
<tr>
<td>Writing Vocabulary</td>
<td>5</td>
</tr>
<tr>
<td>Dictation Task of Hearing Sounds in Words</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 3: Champelle Observation Survey

Champelle’s Running Record of Text Reading score, A, demonstrates Champelle was unable to read simple patterned text accurately. For example, she could not point and read the phrase, “No, no, no,” in a predictable story read by the teacher. She correctly named fifty-three of fifty-four upper and lower case letters. When twenty high-frequency words were presented to her in the form of a list, she did not read any of the words correctly. A standardized administration of a Concepts About Print task demonstrated she was confused about the abstract concepts of “letter” and “word,” and had not started to notice finer features of print in relation to the sequencing of letters, words, and lines of print. Directional patterns of moving left to right across a line of text was also an area of confusion. When asked to write words she knew, she wrote her first and last name, her mother’s name, Lisa, a, and mom. When asked to write a dictated sentence, she correctly recorded ten letters to represent the sounds of the words in the sentence.
Champelle demonstrated strengths in letter knowledge, and a beginning understanding of how to utilize her letter knowledge in text reading and writing.

Prior to the Reading Recovery Intervention, Champelle’s teacher, Kate, reported during reading and writing instruction that she “just sat there.” When asked to write, “She didn’t put anything down...a picture maybe.” “[Champelle] needed more work with visual [attention to print]...she didn’t know one-to-one.” Kate summarized Champelle’s literacy behavior succinctly: “it’s like she had seen print for the first time, I mean she didn’t know what to do in reading or writing.” Champelle’s emerging literacy behaviors observed by her teachers indicated that after a year of formal school instruction in Kindergarten, she was behind the average of her grade cohort. The accelerated learning opportunities available through the Reading Recovery program offered an appropriate intervention, a decision shared by her parents and teachers.

Justin

Upon entry to school, Justin’s Observation Survey results demonstrate varying strengths (see Table 4) in terms of literacy behaviors. Justin’s kindergarten experience allowed him to form letter and word knowledge and a beginning understanding of how these concepts work when reading continuous text.

<table>
<thead>
<tr>
<th>Standardized Task</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running Record of Text Reading Level B</td>
<td></td>
</tr>
<tr>
<td>Letter Identification</td>
<td>51</td>
</tr>
<tr>
<td>Word Test</td>
<td>4</td>
</tr>
<tr>
<td>Concepts About Print</td>
<td>10</td>
</tr>
<tr>
<td>Writing Vocabulary</td>
<td>15</td>
</tr>
<tr>
<td>Dictation Task of Hearing Sounds in Words</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 4: Justin Observation Survey Scores
Justin's Running Record of Text Reading score, B, indicated Justin could read a simple patterned text. He knew fifty-one of fifty-four upper and lower case letters. When twenty high-frequency words were presented to him in the form of a list, he correctly read four of them. A standardized administration of a Concepts About Print task demonstrated he understood voice-to-print match, and directional movement of left to right across text. He was confused about the abstract concepts of "letter" and "word." He had not started to notice finer features of print in relation to the sequencing of letters, words, and lines of print. His control of directional movement and ability to use patterned text to approximate meaning were strengths Eileen described. His control of letter identification and his ability to write high-frequency words were strengths as well. His inability to conduct a sound letter analysis was a weakness.

In the classroom, prior to the intervention, Justin's teacher, Kate, reported he was very quiet and did not use his oral language strengths in the classroom to begin to read and write. "Justin was not a risk taker ... when we used to sit on the rug [to write or read as an entire class] he couldn't sit still. You couldn't keep his attention at all. He had no idea what was going on." Justin's emerging literacy behaviors observed by his teachers indicated that after a year of formal school instruction in Kindergarten, he was seriously behind the average of his grade cohort. The accelerated learning opportunities available through the Reading Recovery program offered an appropriate intervention, a decision shared by his parents and teachers.
Writing Behaviors in Reading Recovery

Champelle and Justin’s writing behaviors shifted in relation to the scaffolded instruction in Reading Recovery with the children demonstrating five levels of control in scaffolded interactions. Within this chapter the Reading Recovery teacher and lesson context is described and then a discussion of the emergence of writing within lessons is provided. Finally, graphic representation of data display charts explain how each of the behaviors shifted over time.

Reading Recovery Teacher and Context

The Reading Recovery teacher involved in the study, Eileen, has taught Reading Recovery over ten years. Eileen has twenty-nine years of experience teaching primary grades and would be considered an expert and a veteran Reading Recovery teacher by her Reading Recovery colleagues and other primary classroom teachers. Eileen may be described as a very energetic, organized and motivated teacher. She became involved in Reading Recovery initially with the hopes of teaching her own handicapped child to read, despite the unpromising future her child’s teachers and doctors reported. Eileen successfully taught her daughter to read, and she has continued teaching children in Reading Recovery for ten years with the same enthusiasm.

Lyons (1991) asserts Reading Recovery teachers are immersed in a learning process that never stops and is always recursive (Lyons et al., 1993b). Eileen is an excellent example of this phenomenon. She explained this process during an interview:

I think every child you work with teaches you something about you as a teacher and about children. Every child is different. What you need to do to help children is different. There isn’t any standard list where children are and where they need to be. It’s different for every kid and you learn from every kid. I think seeing children that other people have written off as probably not learning to read, and watching their progress is probably where I’ve learned the most.
Eileen participates in Reading Recovery continuing education sessions four times a year. She reported that after attending a session the prior Spring, "I started thinking about my own children's writing and thinking ... we weren't getting much power from the writing portion of the lesson ... so I decided at that point to really think about the kind of writing my children were doing ... the kinds of sentences they were writing and what I was doing as far as bringing in things that were known to help them with things they needed to know."

In addition to the required continuing education, Eileen talks about the progress of her students with their classroom teachers. I observed the classroom teacher, Kate and Eileen spend their lunch breaks discussing the progress of the students in each context. Through language and shared understandings with colleagues, Eileen continues to fuel her own learning and constantly improves her teaching.

Champelle and Justin's lessons took place at a large table with each child's teaching materials stored in bins underneath the table. The table was against a wall that held the books used in lessons in baskets organized according to levels of difficulty. Around the room books, posters, and other artifacts related to literacy were attractively placed and changed according to seasons or themes. Cards with a picture of a dog and a lower case d, and a ball with a lower case b posted on the wall in the room. She reported these letter cards provided a source of information and support when students were not sure how to form a letter.

**Writing in Reading Recovery Lessons**

The writing component within Reading Recovery lessons offered a structured setting in which to examine scaffolded interactions (e.g. conversations between teacher and student; actions during shared writing tasks; artifacts of the interactions). The writing
portion of the lesson was approximately ten minutes within a thirty minute time frame of
the entire lesson. This portion of the lesson always began with a conversation about a
personal experience or a response to a book read in the lesson. Through conversation,
Eileen and the children collaborated to generate oral text. The children in collaboration with
Eileen then represented the oral text in written language.

The term “story” means the message recorded in a sentence from the conversation.
The children quickly moved to writing more than one sentence, and were not limited to
narrative story structure. Eileen used the term “story” to describe the writing throughout all
of the lessons.

The children wrote on unlined paper in their “writing books” with the book binding
at the top when the book was open (see Figure 5). The upper portion of the book, referred
to as the practice page, was used to practice letters, fluent writing, and do sound/visual
analysis, as well as to make links that may create bridges between known and unknown
words. This page serves as a page for problem solving how the message is written. Once
a word like “from” has been said slowly and the child has worked out how to hear and
represent the phonemes within the word on the practice page, then the child moves to write
the target word on the portion of the lower portion of the book. The lower page was used
each day for rereading the previous day’s writing. Consequently, everything was written
and spelled conventionally on the lower page.

The oral text generated through the teacher-student conversation is recorded in the
writing book regardless of the grammatical correctness. Clay (1993) offers a rationale for
accepting these approximations in Reading Recovery lessons. In the early stages if the
child is expected to ‘read’ the text back accurately, the teacher should allow the child to
write what the child says. This is particularly important at the stage where the child is
trying to establish the link between oral and written language. If we want children to feel good about talking and recording their language, we must write what is dictated. Acceptance of the children's spoken language avoids the risk of making them feel we reject their contribution. Children may be threatened by drastic reshaping of their language and lose confidence in composing because they feel inadequate. Eileen accepted approximations. For example, when Justin said, "His mom brung the snake to school," Eileen allowed Justin to write brung rather than change his language. Some other approximations were accepted if the approximations did not hinder the rereading of the sentence. For example, the children used capital letters and lower case letters interchangeably during some of the lessons observed.

Eileen and the children worked together to construct the message. Eileen wrote only what the children were unable to write, to facilitate pacing of the ten-minute segment (an approximate time). Eileen observed the children's behaviors as they wrote and she took notes in her lesson record. The record served to inform her teaching and allowed her to customize the program for each child, focusing on individual strengths and needs. Because the interactions emerged from the conversation and the child's unfolding understandings, the writing portion of the lessons were not pre-planned. Eileen utilized her teaching expertise and her understanding of the individual child's strengths and needs to interact with the students. Figure 5 illustrates a sample writing book, and represents the sessions utilized for examples of the observable behaviors discussed later in this chapter.
Figure 5: Sample Writing Book

Play them

I like dollars on my birthday I spend them.
**Observable Writing Behaviors**

Every Reading Recovery program is customized based on children's individual literacy behaviors. Clay (1993b) states, “Each change in control calls for an adjustment in what the teacher does. It is not possible to describe the infinite range of ways in which a teacher might work with individual children” (p. 31). Therefore, the behaviors that emerged from the data reflect only Justin and Champelle’s particular programs and progress during the twelve weeks of observations.

A content analysis yielded categories and subcategories of observable behaviors. The major categories and subcategories follow:

- **Language and Meaning**
  - Story Generation
  - Transitions

- **Directional Concepts**
  - First Word
  - Spacing
  - Return Sweep

- **Letters, Words, and Sentences**
  - Word Analysis
  - Writing Known and Unknown Words
  - Punctuation

- **Monitoring and Correcting**
  - All of the Above Behaviors
  - Letter Formation

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The linear description of the behaviors does not communicate how the behaviors emerged. Throughout the interactions the students orchestrated the behaviors simultaneously. Clay refers to this as the "building up process" children must learn to maintain as they engage in simultaneous "breaking down" processes required to construct text (Clay, 1991a).

An explanation of each category and subcategory and corresponding examples are given below. The examples correspond to the writing book example in Figure 5. Written conventions communicate as closely as possible the talk and actions captured on videotape. Non-verbal actions are in parenthesis, as well as explanations to aid readers in interpreting the actions. T represents Eileen and C represents the child, Champelle.

**Language and Meaning**

The category of Language and Meaning is comprised of two observable behaviors in the data, story generations and transitions. Both behaviors focus on utilizing existing oral language knowledge. The children learned how to hold onto meaning, the building up process, as they problem-solved how to record the oral text, the breaking down process.

Conversations between Eileen and the students to generate oral text to write were coded as story generations. During the conversations, Eileen maintained control of selecting the topic of conversation, but changed the topic if the child expressed interest in something else. The following conversation illustrates story generation between Champelle and Eileen.

T: Oh, what did you say you liked yesterday?
C: I like Rally's because they are good. (rereading yesterday's writing)
T: I like Rally's too! OK, Mrs. Singh is going to get a red rose for her birthday, wasn't she? (pointing to the book)
C: Um hum. (nods head)
T: That's not what you want for your birthday, is it?
C: No.
T: What would you like to have?
C: Umm, some dollars.
T: Oooo, let's write a story about that.
C: I ...like...dollars...on...my..birthday.
T: Have you ever gotten dollars before?
C: Yes.
T: What do you do with them?
C: I spend them.
T: Oh, you spend them. Why don't we put that in our story too.
C: And I spend them.
T: OK, I like dollars for my birthday. I spend them.

Transitions reflect the ability to hold onto the meaning of the original text composed during the story generation, while engaging in the breaking down process of problem solving how to record the children's intended message. Remembering the next word that needed to be written from the oral text was considered a transition.

Shifts over time in this behavior indicate the child's ability to hold onto the intended text while his/her attention was diverted to recording the message. Sometimes the children would forget the original message because their attention was focused on the "breaking down" processes. The children in the study either remembered the next word or they reread the sentence orally or silently to help them call up the next word. Eileen allowed the children to utilize whatever behaviors helped them independently to call up the next word. Justin, for example, utilized silent rereading to call up the next word, while Champelle initially reread sentences orally, shifting to remembering later in lessons. Each of these behaviors varied in terms of level of control between Eileen and the students.

After Champelle and Eileen conducted a letter sound analysis of the word "spend," the transition to the next word occurred.

T: OK, now what? (Eileen prompts to reread the text)
C: I like dollars on my birthday. I spend, no period! (rereads written text)
Directional Concepts

Language is written in two-dimensional space according to a set of conventions. Children must learn correct directional movement which requires a top left starting position; movement must proceed from left to right, and a return sweep is taken back to a left-hand position under the starting point, to establish a top-to-bottom progression. A pattern of movement is required and must be carried out in a particular sequence.

Justin demonstrated control of directional concepts prior to the Reading Recovery intervention, but Champelle experienced some difficulty with this concept initially in lessons and in her independent writing behaviors. During the first lessons, Champelle needed help understanding the top left-hand starting point to begin to record her message. Eileen had to directly show her where to record her first word. “What’s your first word,” was a common prompt Eileen utilized to help both children begin to record their message.

A prompt like this helps the child in several ways. Language used in schools to talk about language itself is one area of learning children have not been introduced to in the home. So the prompt, “What’s your first word,” becomes a signal to identify “first word” from subsequent words and help to define the concept of word versus letter across the writing sessions. Between the teacher and child it can also serve to propel writing forward, a command to begin.

Children learn many concepts while engaged in the scaffolded writing setting, from direct teaching or through demonstration and analogy. For example they learn that when
words are combined into groups of words called “sentences,” space must be used to signal the end of one word and the beginning of another. Spacing aids the visual perception of print. As the eye scans lines of print, the accuracy of grouping words that make up meaningful phrases is increased by the help the eyes get from the ‘spaces between.’ Some children, like Champelle, take a long time to learn the value of spaces. Clay (1975) explains why children find spacing to be a complex learning task.

this difficulty is often more than just a problem of motor coordination. It is a complex mixture of knowing the word segments in the language statement, of knowing the function of the space in the written code, and of having the skill and co-ordination to produce the appropriate spatial record (p. 53).

Attention to directional concepts is demonstrated in this short exchange after conducting a letter sound analysis on the word “birthday.”

T: Long word, where are you going to put it in your story?
C: Right here (moves to write the word)

Letters, Words and Sentences

During the Reading Recovery lessons observed, writing occurred in three ways:

1. The children wrote what they could independently.
2. Eileen wrote what she judged to be too hard for the children to attempt at that point in time, sharing the task.
3. Eileen and the children worked together on words at the cutting edge of their learning, interacting in a variety of ways, and utilizing the practice page throughout the lesson.
The subcategory, “word,” was used for any work on words that fell under the first two descriptions. Independently written words, or words the children wrote the first and/or last letter, and Eileen wrote the rest, fell into this category. Eileen did not use these words for learning opportunities on the practice page.

See Champelle independently writing known words in the following exchange.

C: (Rereads sentence with finger) I like dollars... because?
T: Well, when do you like dollars?
C: I like dollars on. (rereads and writes on)
C: I like dollars on my (rereads and writes my)
C: I like dollars on my birthday. (rereads and stops)
T: How many parts does “birthday” have?

The following is an example of Champelle writing what she can, and Eileen filling in the gaps. Eileen asks Champelle to write only what she knows she can do, that is, monitor her production of a D, and add an s onto the end of a word.

C: Ya! Dollars, D! (places two fingers on the page, makes a lower case B)
T: Um, OK, did you make a D?
C: (Looks to the chart on the wall with a d next to a dog)
  No.
T: You didn’t? (puts correction tape over the second part of the word)
C: (shakes head)
T: Make one. (points to the practice page)
C: (looks to the chart on the board and writes a lower case d on the practice page)
T: Is that a D?
C: (nods)
T: Ok, there. (points to the writing page)
C: (writes lower case d on the writing page)
T: Ok, the rest of “dollar” looks like this. (writes the rest of “dollar”). How are you gonna make it say “dollars?”
C: S (writes the S)
T: Yes.

The subcategory “Word Analysis” was utilized for any work Eileen and the children conducted together on words at the cutting edge of their learning. She interacted with the
children in a variety of ways and used the practice page throughout this segment of the lesson. They attempted many new words using boxes and counters for hearing sounds in words, a technique adapted from an aural task by Elkonin (in Clay, 1993b). Eileen analyzed the word to be written for the level of analysis the children were capable of, and then guided the children to do the analysis so that as much of the sounds or letters were provided by the child.

Eileen taught the children to use known words to write new words. She frequently reminded them they knew words that were similar to the ones they needed to write in terms of sound or visual information. For example, when Champelle needed to write them, Eileen asked her to think of a word she already knew, “the”, and use the sound or visual information to help her write them. In this way, they generated new words from known elements. The following example of Eileen helping Champelle write the word “birthday.”

Because the teacher is using a box for every letter, she has decided that Champelle is ready to pay close attention to both sound and visual information in problem solving how to represent spoken language in written form. This segment also demonstrates how the behaviors of word analysis happened simultaneously with other codable behaviors within the context of writing one word. Word analysis was coded as shared control. Letter formation monitoring was coded as verbal prompting, and letter formation correction was coded as self-initiated.

T: OK, how many parts does that word birthday have?
C: Two.
T: Two parts, and the first part of the word says...
C: Birthday.
T: Well, the first part of the word says...
C: Birth, B!
T: That’s the part we’re gonna work on first. Now the other day we started making a box for every letter, remember? (draws boxes on the practice page for each letter)
C: Uh, huh. (nods head)
T: So, I want you to watch my pencil while I say this, birth. (runs pencil over the top of
boxes, emphasizing the sounds as she articulates it slowly) How are you gonna do it?
C: Put the B right here.
T: You sure are.
C: (writes a B in the first box) Birth.
T: Did you watch? I'm gonna do it again and make sure you're looking real good, OK?
   Birth (repeats articulating and running pencil over the boxes)
C: An F?
T: Well, watch my mouth when I say that.
C: (Begins to articulate the TH digraph by forming her lips and tongue appropriately)
T: Ahh, what is that?
C: T
T: T and what else?
C: um...
T: It's like what word?
C: T?
T: What word do you say when your mouth is doing that?
C: (stares at her)
T: What word is your mouth getting ready to say?
C: Third
T: And what little word do you know?
C: the (articulates the TH digraph strongly)
T: So what do we need?
C: A T
T: And a...
C: T H !
W: Yes, now remember we're gonna put one letter in each box, birth (Runs pencil over
   boxes again). So that's where the TH goes. (points to the last two boxes).
C: T (writes T)
W: And an H over here.
C: (writes H)
W: Let's say the word together, "birth." (Runs her pencil over the box as they articulate it
   together)
C: Birth, er, R? (writes R in the correct box)
W: Yes it is, and we need something right here (writes the I)
C: I!
W: It's the first part of the word. Now what do we need?
C: Day.
W: OK, now I want you to...
C: I know how to write "day"! T H Y!
W: Oh, we're not gonna write "they," we gonna write "day" (articulates the D very
   strong). Stop and think for a minute, you know a word that sounds like day...
C: D...
W: Because with the magnetic letters a few minutes ago, you made a word that sounds
   like "day."
C: Day.
T: Well what word did you make that sounds like "day"? You made the word ... "play," you
   made it with magnetic letters. I want to see it right here. (points to practice page)
C: Play (writes play)
T: OK, that’s “play,” if we want it to say “day…”
C: D
T: What do we have to change?
C: The P.
T: What else?
C: L
T: Ahh, right here, write what “day” is going to look like.
C: (writes bay)
T: OK, I want you to check it. Is everything right?
C: Ummm, no the A?
T: The A looks fine to me.
C: Ummm.
T: What letter do you need first in day?
C: Ummm, a D.
W: Did you make one?
C: (Shakes head)
W: (places correction tape over b) Fix it.
C: (looks to the chart on the wall and writes a d)
T: OK, now let’s take a look, there’s that word you knew “play,” here’s a new one...
C: Day
T: Day, this word “day” is going to go right at the end of the word “birth,” because it’s all one word.
C: Birthday!

Punctuation

Punctuation marks in written language signal the reader when to stop, pause, emphasize, or question. Punctuation aids fluent reading and helps readers understand the writer’s intentions. During the study the children used periods at the end of their sentences, and at the end of Mrs., when Champelle wrote Mrs. Bartley one day. The children used no other punctuation marks in the study.

Monitoring and Correcting

Proficient readers and writers are constantly checking on themselves. Clay (1993) states, “a novice reader must become aware that there has to be a neat fit of language and visual cues in reading and writing almost all the time and if he monitors this he will know
when things are not quite right” (p. 303). This study terms the actual detecting of an error in production, an error that would hinder the rereading of the sentence, is termed “monitoring.”

Clay uses the term “self-correction” to describe when children notice mismatches, pick up additional information, and put it together and achieve the correct response. Monitoring and correcting behaviors were separated in this study because the children observed were able to monitor their production at times but not correct it. After Champelle conducted a sound to letter analysis on “Birthday,” she copied it incorrectly on the writing page. Eileen called her to monitor her writing and Champelle was able to correct it on her own.

T: Long word, where are you going to put it in your story?
C: Right here, (writes “bday,” and moves to reread)
T: OK, now did you write birthday?
C: Yes. (Looks at the word ) Oh.
T: What happened. What did you write?
C: day
T: We need “birthday,” not just “day” (places correction tape over “bday”)
C: (writes “birthday,” copying from the practice page)

Letter Formation

The children had to attend closely to the features of letters when constructing words letter by letter. Within writing words and word analysis, both children demonstrated the ability to form letters. Therefore, specific learning regarding letter formation was not observed in the lessons. They could form letters and name them, but the production of the letters still needed to be monitored and corrected to record their message. This is not characteristic of all Reading Recovery lessons, because some children enter the program with a meager knowledge of letters. Letter formation was only observed when monitoring and correcting was necessary to reread the sentence accurately.
Level of Control

Observable behaviors were analyzed, and the talk and actions that surrounded the behaviors was the basis for the analysis of level of control. Throughout the interactions, five levels of control were found. They ranged from self-initiated or self-control, to teacher control. Each level is described below. Following is an entire lesson, coded for behaviors and level of control. The carats (^) indicate the level of the control for the observable behavior.

Teacher Control (^^^^) When the teacher controlled the entire behavior, it was coded as "teacher control." This included writing a word for the child, telling the child the next word to be written, and where to write the next word. If the teacher provided a copy for the child to directly copy, it was coded as "teacher control." When the teacher needed to demonstrate or model a behavior, it was coded as "teacher control."

Shared Control (^^^) Observable behaviors that were shared by the teacher and the student were coded as "shared control." If the teacher wrote part of the word for the child, the control was shared. This is different from the next level of control, verbal prompting. Part of the task was controlled by the student, but for the entire behavior to be completed, the teacher had to contribute more information.

Verbal Prompting (^^^) "Verbal prompting" is a question or a reminder that prompts the child to the most useful information to solve a specific problem. The child was able to complete the action or behavior after the prompt on his/her own. If the child self-initiated the behavior and then appealed to the teacher to confirm the correct response and the teacher did so, this was coded as "verbal prompting."

There was a fine line between "verbal prompting" and "self-initiating." The teacher prompted at the same time the child began the behavior. It was difficult to distinguish
whether the child would have completed the behavior without any prompt. Therefore, a conservative approach was taken; and the behaviors where any verbal direction from the teacher happened was coded as a “verbal prompt.”

**Non-verbal Prompting** (\(^\)\) Through non-verbal actions, the teacher reminds the student to utilize some source of information to solve a problem. For example, the teacher may simply raise her eyebrows. This indicated something was wrong, and she actually monitored for the child.

**Self-Initiated** (\(^\)\) Independent actions initiated by the child during the writing portion of the lessons were coded as “self-initiated.” If a behavior was self-initiated, no teacher talk or actions prompted the behavior.

Table 5 contains a transcribed and coded lesson. Written conventions communicate as closely as possible the talk and actions captured on videotape. Non-verbal actions are in parentheses, as well as explanations to aid readers in interpreting the actions. Capital letters record the name of a letter, and lower case letters are used to represent sounds that were not complete words. T represents Eileen and C represents the child Champelle.
<table>
<thead>
<tr>
<th>Teacher and Student Talk and Actions</th>
<th>Text</th>
<th>Coded Behaviors and Level of Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>T: Oh, what did you say you liked yesterday?</td>
<td>conversation</td>
<td>Story Generation ^^^</td>
</tr>
<tr>
<td>S: I like Rally's because they are good. (rereading yesterday's writing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: I like Rally's too!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: OK, Mrs. Singh is going to get a red rose for her birthday, wasn't she?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Uh hum. (nods head)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: That's not what you want for your birthday, is it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: What would you like to have?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Umm, some dollars.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: Oooo, let's write a story about that.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: I...like...flowers...on...my...birthday.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: Have you ever gotten dollars before?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Yes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: What do you do with them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: I spend them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: Oh, you spend them. Why don't we put that in our story too.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: And I spend them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: OK, I like dollars for my birthday. I spend them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: Um, ok, did you make a D?</td>
<td>I</td>
<td>Transition - Remenbering ^</td>
</tr>
<tr>
<td>C: (looks to the chart on the wall with a d next to a dog) No.</td>
<td></td>
<td>First Word ^</td>
</tr>
<tr>
<td>T: You didn't? (puts correction tape over the second part of the word)</td>
<td></td>
<td>Word ^</td>
</tr>
<tr>
<td>C: (shakes head)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: like (writes &quot;liek,&quot; stops and looks at the teacher)</td>
<td>liek/like</td>
<td>Space ^</td>
</tr>
<tr>
<td>T: Why are you looking at me?</td>
<td></td>
<td>Word ^</td>
</tr>
<tr>
<td>C: The K supposed to go right here. (points to the e)</td>
<td></td>
<td>Monitoring ^</td>
</tr>
<tr>
<td>T: It sure is. I'm so glad you noticed! (puts correction tape over the second part of the word)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: (corrects the word, and writes &quot;like&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: (Rereads sentence) I like money.</td>
<td></td>
<td>Transition - Rereading ^^^</td>
</tr>
<tr>
<td>T: I didn't write down &quot;money.&quot; You told me in your story ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: I like...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T: I wrote down, &quot;I like dollars.&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C: Ya! Dollars, D! (places two fingers on the page, makes a lower case b)</td>
<td>b</td>
<td>Space ^</td>
</tr>
</tbody>
</table>

Table 5: Sample Coded Lesson
Table 5: (Continued)

<table>
<thead>
<tr>
<th>T:</th>
<th>Is that a D?</th>
</tr>
</thead>
<tbody>
<tr>
<td>C:</td>
<td>(nods)</td>
</tr>
<tr>
<td>T:</td>
<td>OK, there. (points to the writing page)</td>
</tr>
<tr>
<td>C:</td>
<td>(writes lower case d on the writing page)</td>
</tr>
<tr>
<td>T:</td>
<td>Make one. (points to the practice page)</td>
</tr>
<tr>
<td>C:</td>
<td>(looks to the chart on the board and writes a lower case d on the practice page)</td>
</tr>
<tr>
<td>T:</td>
<td>OK, the rest of “dollar” looks like this. (writes the rest of “dollar”). How are you gonna make it say dollars?</td>
</tr>
<tr>
<td>C:</td>
<td>S (writes the S)</td>
</tr>
<tr>
<td>T:</td>
<td>Yes.</td>
</tr>
<tr>
<td>C:</td>
<td>(Rereads sentence with finger) I like dollars... because?</td>
</tr>
<tr>
<td>T:</td>
<td>Well, when do you like dollars?</td>
</tr>
<tr>
<td>C:</td>
<td>(Rereads) I like dollars on. (writes on)</td>
</tr>
<tr>
<td>C:</td>
<td>(Rereads) I like dollars on my. (writes my)</td>
</tr>
<tr>
<td>C:</td>
<td>Birthday.</td>
</tr>
<tr>
<td>T:</td>
<td>OK, how many parts does that word birthday have?</td>
</tr>
<tr>
<td>C:</td>
<td>Two.</td>
</tr>
<tr>
<td>T:</td>
<td>Two parts, and the first part of the word says...</td>
</tr>
<tr>
<td>C:</td>
<td>Birthday.</td>
</tr>
<tr>
<td>T:</td>
<td>Well, the first part of the word says...</td>
</tr>
<tr>
<td>C:</td>
<td>Birth, B!</td>
</tr>
<tr>
<td>T:</td>
<td>That’s the part we’re gonna work on. Now the other day we started making a box for every letter, remember? (draws a box on the practice page for each letter of “birthday”)</td>
</tr>
<tr>
<td>C:</td>
<td>Uh, huh. (nods head)</td>
</tr>
<tr>
<td>T:</td>
<td>So, I want you to watch my pencil while I say this, “birth”. (runs pencil over the top of boxes, emphasizing the sounds as she articulates it slowly) How are you gonna do it?</td>
</tr>
<tr>
<td>C:</td>
<td>Put the B right here.</td>
</tr>
<tr>
<td>T:</td>
<td>You sure are.</td>
</tr>
<tr>
<td>C:</td>
<td>(writes a B in the first box) Birth.</td>
</tr>
<tr>
<td>T:</td>
<td>Did you watch? I’m gonna do it again and make sure you’re looking real good, OK? Birth (repeats articulating and running pencil over the boxes)</td>
</tr>
<tr>
<td>C:</td>
<td>An F?</td>
</tr>
<tr>
<td>T:</td>
<td>Well, watch my mouth when I say that.</td>
</tr>
<tr>
<td>C:</td>
<td>( Begins to articulate the TH sound by forming her lips)</td>
</tr>
<tr>
<td>T:</td>
<td>Ahh, what is that?</td>
</tr>
<tr>
<td>C:</td>
<td>T</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring Letter Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correcting Letter Formation</td>
</tr>
<tr>
<td>d</td>
</tr>
<tr>
<td>dollars</td>
</tr>
<tr>
<td>Word</td>
</tr>
<tr>
<td>Transition - Rereading</td>
</tr>
<tr>
<td>on</td>
</tr>
<tr>
<td>Space</td>
</tr>
<tr>
<td>Transition - Rereading</td>
</tr>
<tr>
<td>my</td>
</tr>
<tr>
<td>Space</td>
</tr>
<tr>
<td>Transition - Remembering</td>
</tr>
<tr>
<td>Word</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word Analysis</th>
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<tbody>
<tr>
<td>Letter Formation</td>
</tr>
<tr>
<td>Monitoring</td>
</tr>
<tr>
<td>Letter Formation</td>
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<tr>
<td>Correction</td>
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Table 5: (Continued)

<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>W: Yes, now remember we're gonna put one letter in each box, &quot;birth&quot; (Runs pencil over boxes again). So that's where the TH goes. (points to the last two boxes).</td>
<td>C: T (writes T)</td>
<td>W: And an H over here.</td>
<td>C: (writes H)</td>
<td>W: Let's say the word together, &quot;birth.&quot; (Runs her pencil over the box as they articulate it together)</td>
<td>C: Birth, er, R? (writes R in the correct box)</td>
<td>W: Yes it is, and we need something right here (writes the I)</td>
<td>C: I!</td>
<td>W: It's the first part of the word. Now what do we need?</td>
<td>C: Day.</td>
<td>W: Ok, now I want you to...</td>
<td>C: I know how to write &quot;day&quot;! T H Y!</td>
<td>W: Oh, we're not gonna write &quot;they,&quot; we gonna write &quot;day&quot; (articulates the D very strong). Stop and think for a minute, you know a word that sounds like &quot;day...&quot;</td>
<td>C: D...</td>
</tr>
</tbody>
</table>
Table 5: (Continued)

<table>
<thead>
<tr>
<th>T: Ahh, right here, write what “day” is going to look like.</th>
<th>birthday</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: (writes bay)</td>
<td></td>
</tr>
<tr>
<td>T: OK, I want you to check it. Is everything right?</td>
<td></td>
</tr>
<tr>
<td>C: Ummm, no, the A?</td>
<td></td>
</tr>
<tr>
<td>T: The A looks fine to me.</td>
<td></td>
</tr>
<tr>
<td>C: Ummm.</td>
<td></td>
</tr>
<tr>
<td>T: What letter do you need first in day?</td>
<td></td>
</tr>
<tr>
<td>C: Ummm, a D.</td>
<td></td>
</tr>
<tr>
<td>W: Did you make one?</td>
<td></td>
</tr>
<tr>
<td>C: (Shakes head)</td>
<td></td>
</tr>
<tr>
<td>W: (places correction tape over b) Fix it.</td>
<td></td>
</tr>
<tr>
<td>C: (looks to the chart on the wall and writes a d)</td>
<td></td>
</tr>
<tr>
<td>T: OK, now lets take a look, there’s that word you knew</td>
<td></td>
</tr>
<tr>
<td>“play,” here’s a new one...</td>
<td></td>
</tr>
<tr>
<td>C: Day</td>
<td></td>
</tr>
<tr>
<td>T: Day, this word “day” is going to go right at the end of the word “birth,” because it’s all one word.</td>
<td></td>
</tr>
<tr>
<td>C: Birth Day</td>
<td></td>
</tr>
<tr>
<td>T: Long word, where are you going to put it in your story?</td>
<td></td>
</tr>
<tr>
<td>C: Right here, (writes “bday,” and moves to reread)</td>
<td></td>
</tr>
<tr>
<td>T: OK, now did you write birthday?</td>
<td></td>
</tr>
<tr>
<td>C: Yes. (Looks at the word ) Oh.</td>
<td></td>
</tr>
<tr>
<td>T: What happened. What did you write?</td>
<td></td>
</tr>
<tr>
<td>C: day</td>
<td></td>
</tr>
<tr>
<td>T: We need “birthday,” not just “day” (places correction tape over “bday”)</td>
<td></td>
</tr>
<tr>
<td>C: (writes “birthday”)</td>
<td></td>
</tr>
<tr>
<td>C: I like dollars on birthday period. (writes a period and she deletes the word “my” on rereading, a reading behavior)</td>
<td>period</td>
</tr>
<tr>
<td>T: I don’t think something is quite right.</td>
<td></td>
</tr>
<tr>
<td>C: I like dollars on birthday, umm.</td>
<td></td>
</tr>
<tr>
<td>T: Huh, think about this for a minute, I want to see this one more time, and I want you to look at every word. (she points to each word as Champelle reads)</td>
<td></td>
</tr>
<tr>
<td>C: I like dollars on my birthday.</td>
<td></td>
</tr>
<tr>
<td>T: There’s that word “my.” Now what did you tell me you were gonna do?</td>
<td></td>
</tr>
<tr>
<td>C: Go back.</td>
<td></td>
</tr>
<tr>
<td>T: What are you gonna do with those dollars?</td>
<td></td>
</tr>
<tr>
<td>C: I spend them. I know I. (writes I)</td>
<td></td>
</tr>
<tr>
<td>C: I spend them. (rereads, spend has not been written)</td>
<td></td>
</tr>
<tr>
<td>T: OK, (draws boxes for “spend” on practice page) I want you to watch my pencil again, “spend.” (runs pencil over box, and articulates slowly)</td>
<td>spend</td>
</tr>
</tbody>
</table>

91
| C: I heard this one, a S. (writes s in the correct box) | € | € |
| C: Then a B right here, uh, a D I mean. (writes D in the correct box) | € | € |
| T: Yes, did you make a D? | € | € |
| C: Um hum. | € | € |
| T: OK, now what? | € | € |
| C: Spend, a N? | € | € |
| T: Say it again real slow. | € | € |
| C: sssppp, P | € | € |
| T: And there is an N, let's see where it is, spend (runs her pencil over the boxes) | € | € |
| C: Spend (says it slowly with the teacher) Right here! | € | € |
| T: Right there. | € | € |
| C: (writes N in the correct box) | € | € |
| T: And this part looks like this. (writes the E in the box) Spend. | € | € |
| C: Spend (says with the teacher, then writes it on the writing page) | € | € |

| T: OK, now what? | € | € |
| C: I like dollars on my birthday. I spend, no period. | € | € |
| T: I spend... | € | € |
| C: Them. | € | € |

| T: "Them," you know a word like that? (points to practice page) | € | € |
| C: The | € | € |
| T: Write the word "the." | € | € |
| C: (Writes the word "the" on the practice page) | € | € |
| T: Now, if we wanted to say the word "them..." | € | € |
| C: Change the T | € | € |
| T: Now, we don't have to change anything, watch, this says "the," we want them. (runs finger over the word the) | € | € |
| C: An M at the end. (writes M) | € | € |
| T: You're so clever, you made a new word. "Them" | € | € |
| C: Them (with the teacher) | € | € |
| T: Put it in your story. | € | € |

| C: (writes them on writing page.) I like dollars on my birthday. I spend them, (writes a period) | € | € |
| W: Ah, good. It would be fun to buy whatever you want, good. We're done. | € | € |

**Shifts Over Time In Observable Behaviors**

Champelle and Justin’s writing behaviors shifted in unique ways over time. The following set of charts illustrates through data display the relationship between the behavior.
and the level of control over time. The number of observable behaviors varied from behavior to behavior, thus each chart must be considered in isolation and not in comparison with others. A statistical analysis was not the aim of quantifying the results; rather, quantifying the behaviors led to a visual representation of how the qualitative data changed over time.

A conservative approach was adopted and if the behavior seemed to be a combination of two levels of control the most supportive level of control was selected as the code. If this approach was not consistently taken, the children might look more independent than the results indicate. The only behaviors that were not supported by some form of teacher talk were non-verbal prompting and self-initiated behaviors.
CHAMPELLE

Story Generation

As revealed in Figure 6, during phase one, Eileen acted on an intent to establish the task. She chose to demonstrate composing stories resulting in more teacher control during phase one with a close use of verbal prompts and direct guidance. Once the task was established, a verbal prompt was all that was required. The data showed in phase two and three the teacher prompted Champelle with verbal directions to compose (n=6). Champelle quickly discovered when Eileen began the conversation the language used would be the source of text. Therefore, she would automatically say what she wanted to write, the conversation itself serving as the verbal prompt. During phase four Eileen increased the complexity of the task and did not accept stories that were only one sentence. Thus, Eileen helped Champelle extend her initial attempt at what she wanted to write by offering her other ideas to write. This resulted in some shared control during this phase. At no point in the lessons did non-verbal or self-initiated codes appear in the story generation behaviors for Champelle.
Figure 6: Champelle Story Generation
Transitions

Champelle demonstrated increased control of transitions from phase one to phase four. In phase one after some initial teacher control to demonstrate the task (Figure 7) and instances of shared control, Champelle began to move quickly from one word to the next, generating the word herself. Over time, Champelle was able to take over the task of transitions either by rereading (Figure 8) or by remembering (Figure 9). When Eileen increased the complexity of the task and Champelle’s responsibility in writing words, again Eileen needed to offer more support for transitions. This is shown in phase three of all charts considering transitions. Champelle utilized oral rereading of the text to gather structure and meaning to help her transition to the next word more than remembering, as is shown in Figure 9. Remembering shifted over time as Champelle was able to hold onto the meaning of the text while engaging in problem solving. Her writing process became more fluent.
Figure 7: Champelle Total Transitions
Transitions - Rereading

Champelle predominantly utilized oral rereading of the text to help her remember the next word of the planned text. During each phase, she self-initiated more oral rereading than other ways of remembering words. The teacher-controlled rereading indicated Champelle reread and during the rereading lost track of what the next word was; thus, Eileen supported the rereading by reminding Champelle of what they had written or what they had yet to write. She would ask a question, or say, “well, I wrote down…”, to support Champelle and draw her back to the original message.

Figure 8: Champelle Rereading
Transitions - Remembering

Champelle was able to simply remember the next word in the text after she became more adept at writing a series of known words without help. For example, she could write three words in a series without rereading, or seeming to read the text silently. The series included simple sentence patterns such as, “I like to ...” and two words in the middle of a complex sentence such as, “on my.” Champelle’s ability to remember words without rereading increased by the end of the study. She was now able to hold onto the meaning of the story she was writing while having to problem-solve. She didn’t need to reread to remind herself of the message she was writing.

Figure 9: Champelle Remembering
Directional Behaviors

As revealed in Figure 10, Champelle quickly understood and began to use conventions of directional behaviors in writing. While the teacher maintained a certain level of control in phases one through three, Champelle showed increasing self-initiation of directional conventions throughout the writing lessons. By phase four she demonstrated control over all directional behaviors. A shift in what and where to write the first word happened in the first lesson. This lesson was characterized by close monitoring and intervention by Eileen. Champelle had to be shown where to record the first word, and that the first word of the oral text must correspond to this placement on the page. A data display chart was not created for this code, because after phase one, Champelle needed only verbal prompting, “Where Ya gonna put the first word?” from Eileen. A separate data display chart was created for spacing because this behavior required more scaffolding.
Figure 10: Champelle Directional Behaviors
Directional Behaviors - Spacing

Eileen scaffolded Champelle’s understandings of spacing in text until phase three of the lessons. She would often praise Champelle for remembering to space. During phase three Champelle used her fingers to space for awhile. This behavior was not demonstrated or encouraged by Eileen or Kate, the classroom teachers, during any of the observations during the study. In the classroom some other children were observed using their fingers during journal writing. Champelle was in full control of concepts of word and spacing by phase four. The teacher acted merely as an observer while Champelle handed this convention independently.

Figure 11: Champelle Spacing
Directional Behaviors - Return Sweep

As revealed in Figure 12, Champelle needed support on return sweep during phase one. During phase one, Eileen told her when she needed to make a return sweep. During phase two she would often move to begin a new line of text after writing two or three words and not complete a line of text. Eileen accepted this behavior until observing her working in the classroom. Once Eileen observed Champelle was not writing to the right margin at all, she decided to offer more direct teaching to accomplish a shift in understanding for Champelle. During phase three, she required her to finish a line of text before starting a new line and leave no space at the right margin. By phase four Champelle no longer needed any support and self-initiated all return sweeps accurately on her own.

Figure 12: Champelle Return Sweep
Words

As illustrated in Figure 13 Champelle demonstrated control of using known words during the first two phases of writing lessons. Words such as “the”, “play” and “like” were quickly written into the message without much prompting from the teacher. When the complexity of the task increased, however, she needed more support using what she knew in new contexts.

![Figure 13: Champelle Words Written Without Analysis](image)

Figure 13: Champelle Words Written Without Analysis
Word Analysis

As revealed in Figure 14, Eileen shared control of word analysis behaviors throughout the study. She constantly increased the complexity and what Champelle was required to contribute to the word analysis, a pattern of teacher and student behavior that consistent with the procedures outlined in the Reading Recovery Guidebook (Clay, 1993b) for “Hearing Sounds in Words.” During the last phase, Eileen asked Champelle to do some analysis that resulted in the teacher having to demonstrate spelling patterns that were new to her. However, Eileen also increased Champelle’s responsibility in writing words, thereby increasing teacher control. By phase four Champelle was beginning to initiate problem solving independently.

Figure 14: Champelle Word Analysis
**Punctuation**

Champelle demonstrated control over using periods to end her sentences from the beginning of the lessons. In phase two she wrote more than one sentence in all of the lessons observed. Eileen demonstrated for Champelle how to use punctuation when writing more than one sentence, resulting in some teacher control. Some verbal reminders were needed; but overall, Champelle demonstrated that she knew how to use periods.

![Figure 15: Champelle Punctuation](image)

Figure 15: Champelle Punctuation
Monitoring and Corrections

The category of monitoring and correcting who was responsible for the detection and subsequent correction. Figures 16 and 17 illustrate that during phase one, Eileen conducted most of the monitoring and had to provide support for the correction of errors by demonstrating and verbally prompting. During phase two, however, Champelle began to monitor what she was writing and demonstrated the ability to correct detected errors with less teacher control. Then as the task complexity increased, monitoring began to a) occur less, and b) be distributed with more teacher control. However, by phase four Champelle was able to correct all of the errors she detected on her own.

Figure 16: Champelle Monitoring
Figure 17: Champelle Corrections
Summary of Champelle's Reading Recovery Behaviors

Champelle's writing behaviors in Reading Recovery shifted towards "self-initiated" behaviors that demonstrate that she took over more responsibility for writing text during the study. She quickly understood that the conversations that took place between Eileen and herself prior to writing were the basis for the story to be generated. Directional behaviors required some scaffolding by Eileen. Champelle gained control over this aspect of the writing task consistently initiating actions required by directional conventions of writing. The data show all of the behaviors shifted to self-initiated control by Champelle, except for word analysis.
JUSTIN

Story Generation

During interactions surrounding the generation of stories in lessons (Figure 18), Justin provided simple sentences that through conversation Eileen extended into more complex messages. As revealed in Figure 18, during phase one, Eileen established the task and needed to demonstrate composing stories resulting in more teacher control during phase one. Then throughout the lessons, the teacher prompted Justin with verbal directions to compose. Justin knew at the beginning that when Eileen began the conversation the language she used would be the source of text. During the first three lessons, the control of story generation was distributed evenly across teacher control, shared control, and verbal prompting. Eileen extended the conversations to shift Justin into writing more than one sentence. Justin began to generate more complex sentences on his own during phase two. As the complexity of the task increased, Eileen offered more support during phase three. Justin began to show more control, needing only a verbal prompt to generate a story in phase four. However, Justin did not begin to initiate the generation of the stories during the study.
Figure 18: Justin Story Generation
Transitions

Moving from word to word while problem solving comprised transitions. As illustrated Figure 19 the total transitions observed indicated that Justin self-initiated some sort of transition or responded to a verbal prompt to transition to the next word in the text. He was able to remember words during phase one and self-initiate silent rereading during the first phase of the study. The support came only when he hesitated, and Eileen prompted him by saying “what now,” or “read.” The teacher-controlled transitions came when Justin forgot the next word or changed the message. As with Champelle, Eileen would say, “now I wrote . . .,” or remind Justin what his story was about. The category of transitions was broken down into rereading, rereading silently and remembering for Justin.

Figure 19: Justin Total Transitions
Transitions - Rereading Silently

During phase one Justin transitioned between words and conventions by self-initiated silent rereading with his pencil and his eyes. At times the teacher provided a verbal prompt to stimulate Justin to reread his message. There were fewer cases of rereading silently, but he self-initiated silent rereading and remembering more than oral rereading. As illustrated in Figure 20, rereading silently was demonstrated in all phases.

![Figure 20: Justin Rereading Silently](image_url)
Transitions - Remembering

Figure 21 reveals that beginning in phase one, Justin showed the behavior of being able to remember the next word. When prompted "What now?" he could simply produce the next word without rereading.

Figure 21: Justin Remembering
Transitions - Rereading

Oral rereading is the behavior Justin used the least in transitioning to the next word as revealed by the number of observable behaviors in Figure 21. He did so less than any other transition behaviors and needed more support during oral rereading. A pattern was observed during lessons that indicated when the pace of the lesson was slow or Justin seemed to not remember the next word, Eileen prompted him to reread the sentence. When she did this, he usually reread to produce the next word and keep the momentum of the writing going. When she controlled more of the transitioning behavior, he had forgotten the next word to be written. Eileen either reread with him, or reread for him.

Figure 22: Justin Rereading
Directional Behaviors

Justin demonstrated control of all directional concepts observed. He responded to some verbal prompting and seldom needed more support. Data display charts for separate behaviors of first word, spacing and return sweep were not created because of Justin’s ability to utilize directional concepts from the beginning of the study without need of teacher support. All prompts for spacing were usually to keep the pace of the lesson forward. For example, Eileen would say, "where ya gonna put that?" even though she knew that Justin knew where to place the word.

Figure 23: Justin Directional Behaviors
Words

Justin demonstrated the ability to write words that were a part of his growing repertoire of known words (Figure 23) during all phases of the study. Eileen helped with words she thought were not known or that were not selected for some instructional point.

Figure 24: Justin Words Written Without Analysis.
**Word Analysis**

Eileen shared control with Justin of word analysis behaviors throughout the study (Figure 24). The complexity of what Justin contributed to the word analysis behaviors increased over time as Eileen increased the complexity of the task. This pattern of teacher and student behavior is consistent with the procedures outlined in the Reading Recovery Guidebook (Clay, 1993b) for “Hearing Sounds in Words”. During the last phase, Eileen asked Justin to do some analysis that resulted in the teacher having to demonstrate spelling patterns that were new to him. Eileen increased Justin’s responsibility in writing words, thereby increasing teacher control.

Figure 25: Justin Word Analysis
Monitoring and Corrections

As revealed in Figure 25, throughout each phase the responsibility for detecting and correcting errors was held by Eileen. However, the data revealed the monitoring consistently was on how to improve letter formation, for example, size and placement. Justin was able to correct the errors which Eileen helped him monitor with little demonstration necessary. During phase four, more support was necessary to correct monitored mistakes (see Figure 26) because they had to do with line placement as Justin wrote more complex sentences.

![Figure 26: Justin Monitoring](image_url)
Figure 27: Justin Corrections
**Punctuation**

Justin demonstrated control over using periods to end his sentences throughout the entire study. In phase two he wrote more than one sentence and continued doing so in the rest of the lessons observed.

![Figure 28: Justin Punctuation](image-url)
Summary Justin’s Reading Recovery Behaviors

Justin’s writing behaviors shifted towards “self-initiated” behaviors quickly in the areas of directional concepts, punctuation, and writing known words. He needed more support in monitoring and correcting letter formation. Over time, all of the behaviors shifted to self-initiated control by Justin, except for word analysis.
Writing Behaviors in Independent Writing

Justin and Champelle were observed once a week for twelve weeks, during their independent writing in the first-grade classroom. The following section first describes Kate, the classroom teacher, with an explanation of how independent writing or journal writing looked in her classroom. Next comes a description of the way that the categories of writing behaviors found in Reading Recovery shifted in independent writing. Data display charts elaborate on each category for each phase, with an example. These charts illustrate how the behaviors were similar or different than those behaviors in the Reading Recovery context. Lastly, the following pages offer a summary of each child in terms of the way that they reconstructed the behaviors from Reading Recovery when they were writing in their journals.

First-Grade Classroom Teacher and Context

Champelle and Justin’s classroom teacher was Kate, who has taught primary grades for 29 years, and is highly respected by her colleagues and parents in the community. Kate possesses a love of children and learning that fuels her abundantly energetic personality. Kate’s classroom is considered a model classroom for The Ohio State Early Literacy Learning Initiative (ELLI). Teachers from all over the country visit her classroom with the staff and faculty of ELLI. Kate enjoys the “visitors,” and is engaged in a recursive learning process where collaboration with the ELLI program fuels her learning.

Independent writing in Kate’s classroom was part of the ELLI framework that served as a flexible organizing tool. The framework includes:

- Reading Aloud to Children - The teacher reads aloud to the whole class or small groups.
• Shared Reading - Using an enlarged text that all children can see, the teacher involves children in reading together, following a pointer.

• Guided Reading - The teacher works with small groups who are at about the same level in reading ability.

• Independent Reading - Children read on their own or with partners from a wide range of materials.

• Shared Writing - Teacher and children work together to compose messages and stories. The teacher acts as scribe.

• Interactive writing - As in shared writing, teacher and children compose messages together and write stories using a “shared pen” technique that involves the children in the writing.

• Guided Writing and Writers’ Workshop - children engage in writing a variety of texts. The teacher guides the process through instruction, through mini-lessons.

• Independent Writing - Children write on their own on a variety of topics and in different genres.

Additionally, the framework includes special attention to letters and the way words work. Coherence among the elements of the framework is achieved through extensions and themes that connect the elements of the framework often across several days in the week. The teacher documents student progress through systematic observation of each child, and encourages involvement of the home and community.
Kate utilized the framework to plan her lessons. Lisa, a student teacher, was present throughout the study. Kate demonstrated for Lisa how to implement elements of the framework as they planned each week's activities together. Kate called independent writing “journal writing.” She explained how she began the year by assessing what the children would do when prompted to write a story.

Now the very first day I give them a lineless piece of paper and pencil and the only prompt I give them is to write for me, write a story, I don’t even tell them to write their name. I wanted Lisa (the student teacher) to especially see this because some of them just sit there. You’ll have others writing two or three sentences. Some of them will start copying things in the room.

Then, Kate explained how she moved the class towards writing in their journals every day.

This year I modeled ... before I ever put a journal in their hands. I actually had on the easel my very own journal. I sat there for a minute and thought before I even picked up my pencil. I said this is what you will do at your seat. Before you even pick up your pencil, I want you to have an idea of what you are going to write and I will usually sit there and time myself for about a minute ... I said to them, I know what I'm going to write and then I go through the process of writing ... word by word. I put my finger under the word after I say it and then go back and reread and then I draw a picture when I'm finished.

Kate did this type of modeling for a week prior to giving each child his/her own journal of unlined paper. The child’s name was written on the top and the journals were numbered. One journal lasted about one week. Journal writing lasted anywhere from thirty to forty minutes, and the children knew that Kate expected them to have something down. Kate allowed the children to either draw first or write first. The expectations in Kate’s classroom were clear: get your personal message written down so you can share. The self-regulated behavior that was the expectation in this classroom was coherent written text that could be reread accurately. If the children attempted to share their writing with Kate and they could not reread it, she would help them craft a text they could reread.
She did this by immediately sitting down next to the child and helping that child change the first draft or write another, maintaining the message the child intended to write. She accepted all approximations with enthusiasm and praise.

The children in Kate's classroom were always engaged in writing. They were never reluctant to write or resistant to putting their ideas into written text. As they wrote, they talked to their peers, moved around the room to use the bulletin boards as sources of information, and frequently gave each other advice on their writing. For example, a boy sitting next to Champelle tried to explain that Champelle was counting words not sentences after Kate reminded the entire class to use punctuation. Champelle became very irritated at Corey over his unsolicited advice. Justin frequently got involved in conversations other students were having over the spelling of words. He found great joy in explaining to his peers how to write a word he knew.

Kate usually worked with one or two students a day during journal writing. All interactions between Kate and Champelle and Justin were solicited by the children. Many times they approached her and asked to read their story to her. Writing completed after working with Kate is not included in the data. The interactions with Kate reflect a greater level of support than self-initiated behaviors which were the focus of the observations in the classroom. For example, Champelle completely rewrote her journal entry twice after she initiated an interaction with Kate.
Independent Writing Behavior

The children were videotaped while writing in their journals once a week. The videotapes revealed how the behaviors found in Reading Recovery were reconstructed during independent writing. The major categories that emerged during Reading Recovery were used to organize the observations of journal writing. After analyzing the videotapes, the journal writing was scored a scoring guide found in Appendix D. The scoring guide was comprised of a six point scale in three categories. The first category was language level or how the child represents their message using letters words and sentences. The second category rated the complexity of the message or the sentence structure and coherency of the text. The final category rated directional concepts of written language.

First, the scores for each child are reported. Then, qualitative descriptions of the writing behaviors are reported for each phase with corresponding examples for the phase of the study. The first column lists the category, the second column summarizes the behaviors observed in the category. The findings are presented in the following set of Figures and Tables found in this chapter. Then the way the children reconstructed the behaviors (e.g., rereading, spacing, word analysis) they were learning in Reading Recovery in classroom journal writing during each phase of the study is summarized.

CHAMPELLE

Early in the study Champelle demonstrated that writing conveyed a message, by talking while she was writing. As she wrote she composed stories orally, recording simple known words like “the” and “play”. Most of her oral text began with a simple pattern “I like to play” then moved to an elaborate story she could not reread. For example, she would say, “It is my brother’s birthday” and write “iterbrtismy”. Initially, Champelle
wrote from top to bottom then across the bottom and up the right side of the page. She wrote in a circular pattern. During phase four, she began to use correct directional patterns and was able to reread her own writing. Over time, she began to use simple sentences focused on one theme, then moved towards punctuated stories in phase four. Champelle’s journal writing for each week is reported in Table 6.

<table>
<thead>
<tr>
<th></th>
<th>Phase I</th>
<th></th>
<th>Phase II</th>
<th></th>
<th>Phase III</th>
<th></th>
<th>Phase IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Week 1</td>
<td>Week 2</td>
<td>Week 3</td>
<td>Week 4</td>
<td>Week 5</td>
<td>Week 6</td>
<td>Week 7</td>
<td>Week 8</td>
</tr>
<tr>
<td>Words, Word Analysis</td>
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<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>and Sentences</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Meaning, Message</td>
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</tr>
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<tr>
<td>Directional</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Principals</td>
<td></td>
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</tr>
</tbody>
</table>

Table 6: Champelle Journal Writing Scores
Each phase (three weeks per phase) was averaged and Figure 28 illustrates shifts over time for Champelle's journal writing. Figure 28 reflects how each category shifted over time.

Figure 29: Champelle Journal Writing Behaviors
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase I Self Initiated Independent Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language and Meaning</strong></td>
<td>- no evidence of planning a message before writing</td>
</tr>
<tr>
<td></td>
<td>- begins with simple sentence structure “I like to play...”</td>
</tr>
<tr>
<td></td>
<td>- then records as she talks</td>
</tr>
<tr>
<td></td>
<td>- multiple themes in one session</td>
</tr>
<tr>
<td></td>
<td>- no evidence of transitions, cannot reread text after the first three words</td>
</tr>
<tr>
<td><strong>Words, Word Analysis, and Sentences</strong></td>
<td>- relies on name and known words as anchors</td>
</tr>
<tr>
<td></td>
<td>- some evidence of word boundaries</td>
</tr>
<tr>
<td></td>
<td>- says words slowly and records as she says them, can only accurately record one or two sounds per word</td>
</tr>
<tr>
<td></td>
<td>- uses some endings “ed” on the end of words</td>
</tr>
<tr>
<td><strong>Directional Concepts</strong></td>
<td>- starts in upper left hand corner and writes two words; then writes down the left hand side of the page, across the bottom and up the right side, then into the middle</td>
</tr>
<tr>
<td><strong>Monitoring and Correcting</strong></td>
<td>- no evidence</td>
</tr>
<tr>
<td><strong>Sample Journal</strong></td>
<td><img src="image" alt="Sample Journal" /></td>
</tr>
</tbody>
</table>

Table 7: Champelle Journals Phase I
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language and Meaning</strong></td>
<td>- no evidence planning a message before writing</td>
</tr>
<tr>
<td></td>
<td>- begins with a simple sentence structure “I like to play”</td>
</tr>
<tr>
<td></td>
<td>- then records as she talks</td>
</tr>
<tr>
<td></td>
<td>- multiple topics in one session</td>
</tr>
<tr>
<td></td>
<td>- no evidence of transitions</td>
</tr>
<tr>
<td><strong>Words, Word Analysis, and Sentences</strong></td>
<td>- relies on known words as anchors</td>
</tr>
<tr>
<td></td>
<td>- some evidence of word boundaries</td>
</tr>
<tr>
<td></td>
<td>- says words slowly and listens to herself before attempting to record sounds</td>
</tr>
<tr>
<td></td>
<td>- can record more consonants accurately, some vowels</td>
</tr>
<tr>
<td></td>
<td>- uses periods throughout text</td>
</tr>
<tr>
<td><strong>Directional Concepts</strong></td>
<td>- starts in upper left hand corner and writes two words then writes down the left hand side of the page, across the bottom and up the right side, then into the middle</td>
</tr>
<tr>
<td><strong>Monitoring and Correcting</strong></td>
<td>- no evidence</td>
</tr>
<tr>
<td><strong>Sample Journal</strong></td>
<td>![Sample Journal Image]</td>
</tr>
</tbody>
</table>

Table 8: Champelle Journals Phase II
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language and Meaning</strong></td>
<td>- stops and reflects before writing</td>
</tr>
<tr>
<td></td>
<td>- begins with “I like to play ...” simple sentences</td>
</tr>
<tr>
<td></td>
<td>- rereads after every word, then thinks about next word to write</td>
</tr>
<tr>
<td></td>
<td>- single themes</td>
</tr>
<tr>
<td><strong>Words, Word Analysis, and Sentences</strong></td>
<td>- word boundaries clear</td>
</tr>
<tr>
<td></td>
<td>- says words slowly, listens to herself then record some consonants correctly</td>
</tr>
<tr>
<td><strong>Directional Concepts</strong></td>
<td>- writes left to right one or two words then starts a new line with a return sweep.</td>
</tr>
<tr>
<td><strong>Monitoring and Correcting</strong></td>
<td>- During rereading notices some mistakes in writing known words and recording intended message, but ignores them</td>
</tr>
<tr>
<td></td>
<td>- does not fix monitored errors</td>
</tr>
<tr>
<td><strong>Sample Journal</strong></td>
<td>I like to play in room 10 and my brother like to play with me.</td>
</tr>
</tbody>
</table>

Table 9: Champelle Journals Phase III
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language and Meaning</strong></td>
<td>-stops and reflects before writing, -begins with “my,” instead of “I like,” but sticks to simple sentence structure -rereads after every word, then thinks about next word to write -single themes</td>
</tr>
<tr>
<td><strong>Words, Word Analysis, and Sentences</strong></td>
<td>-able to record dominant consonants after saying words slowly (fnd/fun)</td>
</tr>
<tr>
<td><strong>Directional Concepts</strong></td>
<td>-correct directional pattern</td>
</tr>
<tr>
<td><strong>Monitoring and Correcting</strong></td>
<td>-notices mismatches between what she says during rereading and text she has written, “oops” -notices known words written incorrectly most of the time -corrects most known words written me/my</td>
</tr>
</tbody>
</table>
| **Sample Journal**                                | We... play on ctsm.... in play w/et m. 

  

Table 10: Champelle Journals Phase IV
**Champelle’s Reconstructions**

Champelle made significant shifts in her writing over the twelve weeks of the study. The teachers actively sought to help her make connections between the two contexts. Kate reminded her, “What you do with Mrs. Wilson (Eileen) is what you need to do here.” This chapter discusses each set of observable behaviors from Reading Recovery in terms of Champelle’s behaviors in journal writing over time to illustrate how she reconstructed the behaviors.

**LANGUAGE AND MEANING**

During Reading Recovery lessons, Champelle composed stories with Eileen. She relied on verbal prompts to produce some oral text to write. Eileen would begin a conversation and help Champelle decide on a message to write. When she composed text in the classroom during journal writing, initially, she relied on a standard, “I like to play” pattern, then began to talk to herself and write known words in strings. However, because she was unable to hold language and meaning together while orchestrating the complex analysis required to represent her thoughts in written language, she was unable to reread these messages as a later time.

For the first half of the study her language and meaning behaviors were different than in RR lessons. Champelle utilized simple patterned text to begin writing, then she used an oral message to carry the meaning of the journal writing rather than written text. Multiple themes emerged from her talk. For example, she would talk about her mom, then school, then her brother. She rarely used pictures during the first part of the study, although the teacher, Kate, encouraged the class to draw pictures with their writing.
During phase three, Champelle began to integrate the language and meaning of her oral messages with the process of representing messages in writing. A critical behavior that facilitated this breakthrough in independent writing was the use of oral rereading. When Champelle began to reread aloud after writing each word, she understood that what she said had to match what was on the page. Similar to Reading Recovery lessons, she utilized oral rereading, rather than silent rereading or remembering, to transition to the next word. In Reading Recovery Champelle used rereading to remember the next word of the oral text that was pre-planned with the teacher before writing the first word. When writing in journals, she reread and then thought about what she was going to write next. The rereading behavior observed in journal writing provided evidence she was in the process of reconstructing the behavior or developing inner speech for the act of writing a fixed message.

WORDS, WORD ANALYSIS, AND SENTENCES

Champelle utilized her strengths of letter knowledge in her independent writing from the beginning of the observations during independent writing. She could record some letters for her message. Additionally, she utilized her knowledge of known words to frame her stories, although on many occasions she did not monitor their production. During the third and fourth phase, Champelle noticed most errors but did not consistently correct them. Corrections were more prevalent during the last observation of the study.

The major behavior observed during independent writing that was seen in Reading Recovery was saying words slowly and recording what she could hear. Over time, her ability to record sounds correctly improved, and her approximations were closer to conventional spelling. During the observations Champelle utilized saying words slowly as
her first strategy to problem-solve new words. The environment or her peers were not sources of information used. Although her classroom teacher encouraged using the word wall, or conversation among peers to spell new words, Champelle did not engage in any of these behaviors during the observations. Her reconstruction of word analysis was more direct. She relied only on what she learned in Reading Recovery to get to new words.

The complexity of Champelle's writing increased over time. As she began to realize the print had to match her words, she began to utilize punctuation correctly rather than interspersing it among random letters and words. She used periods to indicate the end of her message, rather than interspersing it among random letters and words recorded during phases three and four.

DIRECTIONAL CONCEPTS

Upon entering the program, Champelle demonstrated confusions about directional behaviors in reading and writing. These behaviors seemed to be under control in the Reading Recovery setting, but her independent writing indicated she did not transfer the understandings at the same time she self-initiated them during Reading Recovery. During phase three she began to write using the correct directional patterns. The shift in using directional behaviors more conventionally came when she was able to independently make return sweeps in journal writing settings. Over time, her writing became smaller, and she would write more than one or two words on a line.

MONITORING AND CORRECTING

Champelle's monitoring and correcting behaviors emerged in independent writing as she began to reread during phases three and four. During phase two, she self-initiated
monitoring and correcting known words in Reading Recovery as she wrote them. She did not conduct this type of self-initiated behavior in independent writing until phase three. Although she noticed mismatches in her writing as she reread, she was not observed correcting the words until phase four.
JUSTIN

Justin’s independent writing in journals shifted in terms of complexity of messages and his ability to record sound in words. From the beginning of the study, Justin demonstrated control of directional principals. Over time, he began to take risks with new words he did not know, conducting independent letter sound analysis. Throughout the study Justin’s writing also moved from relying on simple sentences to frame his stories to more complex sentence structures. Justin’s scores for his journal writing throughout the study are summarized in Table 11.

<table>
<thead>
<tr>
<th></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Week 1</td>
<td>Week 2</td>
<td>Week 3</td>
<td>Week 4</td>
</tr>
<tr>
<td>Words, Word Analysis and Sentences</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Language and Meaning, Message Quality</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Directional Principals</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 11: Justin Journal Writing Scores
Figure 30: Justin Journal Writing Behaviors
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase I</th>
</tr>
</thead>
</table>
| **Language and Meaning**                      | - looks around the room, reflects silently before writing  
|                                               | - rereads with his pencil tip over and over  
|                                               | - loses meaning on some rereading and forgets what he wrote because he can't read it, changes intended text (down to off)  
|                                               | - simple sentences  
|                                               | - talks with peers and uses environment as a source of information as he writes  
|                                               | - draws pictures of the text after he writes |
| **Words, Word Analysis, and Sentences**        | - asks peers how to spell words  
|                                               | - uses books and word walls for spelling  
|                                               | - says words slowly, correctly records initial and ending consonants  
|                                               | - uses periods at the end of simple sentences |
| **Directional Concepts**                       | - uses fingers to space  
|                                               | - correct directional pattern |
| **Monitoring and Correcting**                  | - monitors words written that he can't read when rereading text  
|                                               | - attempts to correct monitored words by asking peers or using bulletin boards |
| **Sample Journal**                             | ![Sample Journal Image] |

Table 12: Justin Journals Phase I
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase II</th>
</tr>
</thead>
</table>
| **Language and Meaning**                           | -reflects before he writes, draws a picture, then writes some more  
|                                                   | -begins some writing with my...  
|                                                   | -rereads after writing every word outsold  
|                                                   | -talks with peers and uses environment as a source of information as he writes  
|                                                   | -draws pictures of the text after he writes |
| **Words, Word Analysis, and Sentences**            | -relies mostly on neighbors for spelling  
|                                                   | -articulates words slowly and can accurately record initial, ending and some medial consonants  
|                                                   | -known words are more complex (he wrote “house” quickly from RR lesson) |
| **Directional Concepts**                           | -correct directional pattern |
| **Monitoring and Correcting**                      | -monitors words written that he can’t read when rereading text  
|                                                   | -attempts to correct monitored words by asking peers or using bulletin boards |
| **Sample Journal**                                 | ![Sample Journal Image] |

Table 13: Justin Journals Phase II
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase III</th>
</tr>
</thead>
</table>
| **Language and Meaning**                          | -reflects before he writes, draws a picture, then writes some more  
- rereads with pencil silently  
- talks with peers and uses environment as a source of information as he writes  |
| **Words, Word Analysis, and Sentences**            | -relied mostly on neighbors for spelling  
- articulates words slowly and can accurately record initial, ending and some medial consonants  
- interacts with peers by offering help on how to spell words and clap syllables  |
| **Directional Concepts**                           | -correct directional pattern  
- uses fingers to space  |
| **Monitoring and Correcting**                      | -monitors words written that he can't read when rereading text  
- attempts to correct monitored words by asking peers or using bulletin boards  |
| **Sample Journal**                                | got died. 300 THE  
knos he died  
3 days. |

Table 14: Justin Journals Phase III
<table>
<thead>
<tr>
<th>Observable Behaviors From Reading Recovery Lessons</th>
<th>Phase IV</th>
</tr>
</thead>
</table>
| **Language and Meaning**                          | -complex sentences.  
|                                                  | -more than one sentence for same theme  
|                                                  | -reflects before he writes, draws a picture, then writes some more  
|                                                  | -rereads with pencil silently  
|                                                  | talks with peers and uses environment as a source of information as he writes |

| **Words, Word Analysis, and Sentences**            | -relied mostly on neighbors for spelling  
|                                                  | -articulates words slowly and can accurately record initial, ending and some medial consonants and vowels  
|                                                  | -interacts with peers by offering help on how to spell words and clap syllables |

| **Directional Concepts**                           | -correct directional pattern  
|                                                  | -uses fingers to space |

| **Monitoring and Correcting**                      | -monitors words written that he can’t read when rereading text  
|                                                  | -attempts to correct monitored words by asking peers or using bulletin boards |

| **Sample Journal**                                 | ![Sample Journal Image] |

Table 15: Justin Journals Phase IV
Justin's Reconstructions

Justin's independent writing behaviors shifted over the twelve-week period of the study. The shifts dealt primarily with the complexity of his message and his increasing ability to hear and record sounds in words. During the study the teachers did not indicate Justin was having difficulty transferring any of the behavior he was learning in Reading Recovery into the classroom. The behaviors looked qualitatively different from the context of Reading Recovery. Justin incorporated the behaviors into other productive behaviors when he composed text independently.

MEANING AND LANGUAGE

Justin relied on simple sentence patterns during independent writing in phase one. In Reading Recovery, his teacher, Eileen extended the simple sentences he initially offered, through conversation. Justin did not take risks in the classroom or in Reading Recovery.

As his skill in recording words increased in Reading Recovery, the complexity of his messages increased in journal writing. He often wrote about his friends, family, and school. Justin looked out into the air and constructed a plan before he began to write. He did not verbally say his message before he began to write, but he usually wrote one word after the other. He did not stop to compose while he was writing. This behavior was encouraged in Reading Recovery and during classroom instruction.

Justin self-initiated rereading his sentences during all of the observations. He used rereading to help him keep his momentum going and remember the next word of the planned text. During the beginning of the study, this behavior was more overt and he reread out loud. Then he shifted to rereading silently with his eyes or his pencil during phase three and began to write more extended text without rereading.
WORDS, WORD ANALYSIS, AND SENTENCES

Justin’s behaviors concerning words, word analysis and sentences indicated he reconstructed the behaviors learned in Reading Recovery into other ways of working on words. He wrote his known words written in Reading Recovery and monitored their production from the onset of the observations. Additionally, he utilized punctuation at the end of every sentence he wrote during independent writing, even when writing more than one sentence.

During independent writing, Justin had a number of ways of working on words. His pattern of behaviors indicated he first looked around the room to see if he could find the correct spelling, then he would ask a friend; finally, he would try to say the words slowly and record the sounds. Over time, his ability to hear and record sounds increased. This correlates to the shifts Eileen observed in Reading Recovery: as she increased the complexity of word analysis, he was able to record more complex words. Over time, Justin’s confidence in his ability to write words was obvious as he actively sought out to help his peers write words.

MONITORING AND CORRECTING

Justin demonstrated the ability to monitor his writing. He would often reread and check the speech to print match. He corrected all detected mismatches from the beginning of the study. The errors he did not monitor usually involved words on which he had he conducted a sound-to-letter analysis and was satisfied with his production. An example of this can be found in his writing of lives for loves in the example given for phase four.
Follow up Information

Justin and Champelle were exited from the program approximately one week after the study was completed. Their exit scores on a second administration of the Observations Survey indicated they were above the classroom average. The classroom observations conducted by both Kate and Eileen confirmed Champelle and Justin were ready to discontinue their Reading Recovery program.

Justin parents returned a survey concerning their observations of Justin at home. It indicated they thought the program made a substantial difference in Justin’s schoolwork. At home, he was more confident and more interested in spelling words. Champelle’s parents did not return the survey, but personal contact with the teachers indicated they read every night with Champelle at home and were impressed with her progress.

Summary

In this chapter the findings of the inquiry into the way children reconstruct scaffolded instruction from Reading Recovery was reported. Also a detailed description of the way observable writing behaviors shifted over time in relation to teacher-student control was described. Next, the way that each student’s independent writing behaviors emerged throughout the study was presented. Finally, a description of the way each child reconstructed the scaffolded instruction from Reading Recovery in the context of independent writing behaviors was explained. The findings indicate that both children’s independent writing improved over time and they utilized the behaviors they learned in Reading Recovery in different ways.
CHAPTER 5
DISCUSSION

Introduction
The purpose of this study was twofold: first, to describe in detail how children’s literacy understandings shifted over time as a result of the scaffolded instruction in the writing portion of Reading Recovery lessons; second, to examine how two students reconstructed those understandings outside of the context of Reading Recovery, as evidenced by their talk and writing behaviors during independent writing. The discussion is organized around six main sections: 1) a brief summary of the findings; 2) a discussion of the findings in relation to broader theoretical literature and cautions; 3) a discussion of the findings in relation to existing literature on scaffolding and Reading Recovery; 4) implications for how children learn to write and teaching writing in classrooms; 5) directions for further research and; 6) limitations of the study.

Section I: Summary of the Findings
1. What writing behaviors shift from shared to self-control in the instructional interactions during the writing portion of Reading Recovery lessons?
Specific writing behaviors surfaced through a content analysis (Patton, 1990) of two children’s writing behaviors in Reading Recovery. The observed behaviors were consistent with Clay’s observations of early writers (1975) and the type of inner control
described in *Becoming Literate: The Construction of Inner Control* (1993). As revealed in Table 16, there was a relationship between the behaviors described in detail in chapter four and Clay's (1991) research:

<table>
<thead>
<tr>
<th>Clay's Research</th>
<th>Observed Behaviors</th>
</tr>
</thead>
</table>
| * Break down the task to its smallest segments while at the same time synthesizing them into words and sentences | * Language and Meaning and Sentences  
- Story Generation  
- Transitions  
Punctuation |
| * Attend very closely to features of letters  
* Construct their own words, letter by letter  
* Engage in their own form of segmenting sounds in words in order to write them | * Letters And Words,  
-Word Analysis  
-Writing Known and Unknown Words |
| * Direct attention to special concepts  
* Work within the order and sequence constraints of print | * Directional Concepts  
-First Word  
-Spacing  
-Return Sweep |
| * Construct inner control | * Monitoring and Correcting  
- All of the above behaviors |

Table 16: Observable Writing Behaviors

The results of the analysis revealed patterns of writing behavior within the Reading Recovery lessons and how they shifted over time. Although the term “shared control” was used in the research question, there were four levels of control that relied on the teacher “sharing control” and one level of control that indicated the child governed the entire action. When the child demonstrated independent control of the behavior without the support or prompting of the teacher, the level of support was self-initiated.
The four levels of control that involved the “shared control” of the teacher break down into four categories, non-verbal prompting, verbal prompting, shared control, and teacher control. Non-verbal prompting to action by the teacher involved only physical moves like tapping the paper or raising the eyebrows. The next level of control was verbal prompting. Verbal prompting was evidenced by the teacher prompting to the action that needed to be carried out. She did not perform any of the writing behavior, but only asked questions, or made statements that served to remind the student what information to use to problem-solve. When the teacher and the student shared the act of recording the actual letters of the words, this indicated shared control. If the teacher directly told the child what to do or demonstrated the behaviors, the level of control was teacher controlled.

Each child demonstrated a pattern of more teacher control to self-initiated writing behavior in Reading Recovery. Justin’s writing behaviors shifted towards self-initiated quickly during the first three weeks of the study in the areas of directional concepts, punctuation, and writing known words. Justin needed more support in monitoring and correcting letter formation. Over time, all of Justin’s behaviors shifted to self-initiated control except for word analysis which remained in the shared control and verbal prompting level of control.

Champelle’s writing behaviors also revealed a pattern of more teacher control to self-initiated writing behavior. Directional behaviors required more support than the other behaviors, but eventually, Champelle gained control over this aspect of the writing. Over time all of the behaviors shifted to self-initiated control by Champelle except for word analysis which remained in the shared and verbal prompting level of control.
Both children's word analysis behaviors remained in the verbal prompting and teacher control level. A possible explanation of this finding lies in Eileen's instructional decisions. The teacher increased the complexity of the task and the student's responsibility when analyzing new words over time. As she did this, she supported, or scaffolded the students' attempts to help them record their message. The patterns indicated both children shifted from randomly recording sounds they heard, to hearing a consonant framework and some vowels, then to using more complex spelling patterns over the twelve weeks of the study.

The findings reflect a difference between Wood et al.'s (1976) conception of scaffolding, and the type of scaffolding that occurred in this study. In the Wood et al. (1976) study, control was gradually shifted to the children, working in the zone of proximal development, until independent problem solving was achieved. In a set task, like writing in Reading Recovery, the teacher's expectations were raised, but the task remained somewhat shared. When the teacher helped the child gain control of conventional features of recording a message, like spacing and directional concepts, the teacher then constantly "upped the ante" in each successive lesson, requiring the student to do more of the word analysis work. Therefore, control of problem solving behavior was maintained in the shared control domain to some extent.

2. How do children's understandings of writing shift over time in relation to their new experiences in Reading Recovery as evidenced in their independent writing behaviors?
   a) What evidence of the self-controlled behaviors learned in Reading Recovery can be found in the self-regulated behaviors of children's independent writing?
Justin’s behaviors in journal writing indicated he immediately incorporated the new understandings into his existing network of literacy behaviors. During the first journal writing session, he planned, reread, monitored and corrected his own writing. He quickly created an inner plan that guided his actions during independent writing.

Initially, Champelle knew letters and known words were connected to oral text, but she could not access the message while composing. After six weeks of Reading Recovery and many explicit links provided by both teachers, Champelle began to utilize the behaviors demonstrated in Reading Recovery in journal writing. She began rereading text and saying words slowly in order to hear their sounds. As Champelle began to reread, she also began to monitor her writing. By week six she demonstrated control of mental plans and inner speech for journal writing in the classroom.

b) How are the behaviors similar to or different from those demonstrated in the context of the Reading Recovery lesson?

Justin immediately incorporated the behaviors in his existing network of competencies. When he approached the task of problem solving a new word by word analysis in journal writing, rather than rely on the word analysis skills he had learned in Reading Recovery, he first sought out peer help, and environmental information including books and word walls. If this search proved unproductive, he began to utilize the same strategy Eileen taught him, saying words slowly and recording what he heard. Justin’s inner speech or self-regulatory behaviors were not a mirror of what Eileen taught him. Rather, Justin quickly reconstructed the behaviors into his existing mental plans. Over time, his ability to produce coherent written text increased as he wrote in more complex sentence patterns and was able to record sounds accurately.
Champelle reconstructed the behaviors observed in Reading Recovery in different ways than Justin. Champelle's behaviors emerged slowly compared to Justin's. After six weeks of observations, Champelle began to write coherent text she could reread. Champelle used rereading to remember the next word of the oral text that was pre-planned with the teacher before writing the first word in Reading Recovery. When writing in journals, she reread and then thought about what she was going to write next. Champelle was constructing her own "writing process". Authors often use their own writing as a generating tool to help them record their ideas, Champelle's developing cognitive plans for writing were beginning to resemble what authors do in real life, write to see what they think, reread, and revise as they write. This process originated in the instructional conversations with Eileen in Reading Recovery. How Champelle processed the new information differed from Justin. The difference resulted in Champelle requiring more time to develop self-regulated behaviors in journal writing than Justin.

Champelle's behaviors during journal writing initially were closely tied to the behaviors as they were observed in Reading Recovery. The classroom teacher encouraged the children to utilize environmental features as sources of spelling like peers and word walls to problem-solve text. During the study Champelle neglected these sources of information. Rather, she relied solely on the language that shaped her behavior in Reading Recovery, saying words slowly and writing what she heard. This evidence suggests that her success in producing the classroom expectation had its beginnings in the scaffolded instruction in Reading Recovery.

Other evidence that links Champelle's behaviors to Reading Recovery is that she rarely drew pictures in her journal during the first six weeks of the study. One explanation might be that Eileen and Champelle did not draw pictures for the stories they wrote in
Reading Recovery. Later, during interviews, Kate commented on a journal entry for Champelle that had a picture drawn for it: “Now this is important. She drew a picture.” Champelle was demonstrating some ability to integrate knowledge from Reading Recovery with classroom expectations.

**Section II: Broader Theoretical Framework and Cautions**

According to Diaz et al. (1990), children's private speech leads to the construction of self-regulatory, flexible inner plans that help children control higher order cognitive operations. Vygotsky (1986) termed the inward turn that private speech takes as inner speech. Clay (1991) refers to this phenomenon as “inner control.” The purpose of this study relates to Vygotsky’s theory as it sought to examine how at-risk children develop inner speech, or self-regulation in writing.

Researchers have attempted to help children develop higher order cognitive skills in the past. Training studies (Diaz et al., 1990) proved to be unsuccessful in helping children develop private speech and self-regulation. Children were unable to control the targeted behaviors in new situations. Diaz et al. (1990) labels these types of behaviors “self-controlled.” Self-controlled behaviors (controlled by private speech) become self-regulatory (controlled by inner speech), when they are flexible, fluent plans of actions that generalize to other contexts.

The children in this study were able to utilize the behaviors demonstrated in Reading Recovery in a new context, classroom journal writing. Thus, the journal writing behaviors indicated they had developed an inner control or inner speech. During journal writing, each child demonstrated inner speech at different times. Table 17 demonstrates the
differences between the two children during the four phases of the study. During phases one and two, Champelle produced written coherent text only after she worked with her classroom teacher during impromptu interactions. During phases three and four, Champelle began to demonstrate control of her writing behaviors and wrote coherent text that she could reread.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Champelle</th>
<th>Justin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>inner speech/self-regulated</td>
<td>inner speech/self-regulated</td>
</tr>
<tr>
<td>2</td>
<td>inner speech/self-regulated</td>
<td>inner speech/self-regulated</td>
</tr>
<tr>
<td>3</td>
<td>inner speech/self-regulated</td>
<td>inner speech/self-regulated</td>
</tr>
<tr>
<td>4</td>
<td>inner speech/self-regulated</td>
<td>inner speech/self-regulated</td>
</tr>
</tbody>
</table>

Table 17: Development of Inner Speech

The assumptions undergirding this study state learning and development are shaped by meaningful experiences where children construct understanding through the use of language in cultural settings. The interactions examined in the Reading Recovery lessons during this study yielded a set of observable behaviors. These behaviors became the focus of further observations during independent writing as the children reconstructed those behaviors in another setting. Thus, one might assume a one way relationship from the data analysis. This assumption would be dangerous considering learning and development from a constructivist view. The observable behaviors in the data emerged from the interactions between the teacher and the student. The teacher responded to the children’s developing tacit and overt theories of writing and the world which may be described as the children’s “voice.” Children’s voices play a large role in how they develop as writers (Dyson, 1995) and how they act upon the writing opportunities in Reading Recovery.
An alternate hypothesis to the data would be to examine the child’s “voice” as it surfaced during the scaffolded interactions in Reading Recovery. How did the teacher respond to and consider the voice of the student? Also, the power relationship between the teacher and student during Reading Recovery interactions needs to be examined. Did the power relationship between the teacher and student in this study restrict the children’s opportunity to contribute to the interactions? The examination of children’s voice as it is manifested in Reading Recovery might provide another lens to view the concepts of inner speech and self-regulation. Additionally, this lens would prevent the misinterpretation of the data in this study as a one way transmission of writing behaviors.

Section III: Scaffolding Instruction and Reading Recovery Lessons

Three studies examined scaffolding instruction of writing in the context of Reading Recovery lessons. DeFord (1994) found highly successful teachers in Reading Recovery supported problem-solving efforts. Children took progressively more responsibility for writing across their instructional program. The teachers actively sought to shift control of the writing and reading events in lessons from shared control to self-control, characteristics of scaffolded instruction. The findings of this study are consistent with DeFord’s (1994) findings of highly successful teachers and students in Reading Recovery. Both children completed their programs quickly, in approximately fifteen weeks, and their writing behaviors were similar to the patterns found in DeFord’s (1994) study. Eileen shifted control of aspects of the writing process to both students while supporting their problem-solving. However, Eileen also increased the task difficulty in two areas, additional complexity in sentence structure and a more difficult word analysis. When the
demands increased for the learner, the teacher offered additional scaffolding. These findings are different from the DeFord (1994) study due to the fact that this study utilized in process teaching instead of lesson records as in DeFord's study.

Hobsbaum, Peters, and Sylva (1996) directly addressed the issue of the relationship between Reading Recovery teacher-student interactions and scaffolding through a longitudinal study of seven Reading Recovery teachers and seventeen students in England. The Reading Recovery teachers allowed children to take control of parts of the entire writing task, but the teacher retained the responsibility for extending the difficulty of the task. They found three patterns of interaction over three phases of a child's program. During phase one the teacher closely monitored and intervened. Phase two was characterized as the teacher acting as a prompt or a memory amplifier, and during phase three the teacher was essentially reactive.

The two children in this study gradually demonstrated greater control of the observed behaviors through self-initiated actions over time. The findings of this study are consistent with Hobsbaum et al.'s finding except for word analysis and transitions. Word analysis behaviors remained in the teacher control and verbal prompting level of control rather than moving to Hobsbaum et al.'s (1996) third phase where the teacher was essentially reactive. The focus of the Hobsbaum et al. (1996) study was on teacher-student interactions. They concluded that the word analysis behaviors of their children were surrounded by talk, but they did not indicate how the talk did or did not support the child's ability to control the observable behaviors. The findings of both studies indicate further exploration is needed into the nature of word analysis behaviors in Reading Recovery as they are shared by the teachers and students.
Generally the finding of this study are similar to Hosbaum et al. (1996). However, the findings of this study do not correspond to one of the patterns found in Hosbaums et al.'s (1996) study. In the latter, the teachers predominantly controlled transitions. The teacher very quickly shifted the responsibility of transitioning to the children. The children either self-initiated what the next word was by remembering, rereading out-loud, or silently rereading, or the teacher prompted with questions like “Now what?” or “Read your story.” If the child had difficulty transitioning to the next word, the teacher provided support.

Wong, Groth, and O'Flahavan (1995) attempted to use a sociocultural framework to analyze five Reading Recovery teachers’ interactions with children in two contexts, familiar reading, and reading new stories. The study found that teachers changed the nature of their “scaffolding” comments as a function of text familiarity. They defined scaffolding as “a metaphor to describe ways that a tutor assisted a child during a problem solving activity” (p.17).

Although this study examined the writing portion of Reading Recovery lessons, the patterns of interaction were similar to those in Wong et al. (1995). The findings of this study indicate that Eileen changed the way she interacted with the students, as demonstrated in the data display charts in chapter four. Instead of text familiarity being the function of the change in teacher support, the student’s ability to self-initiate writing behaviors was the function of the change in teacher support.

The scaffolded writing instruction within Reading Recovery lessons has received criticism. Barns (1997) asserted the children she was teaching in Reading Recovery were reluctant writers and attributed this to the program. “The practices I must follow in
Reading Recovery are contradictory to principles of writing development and counter the experiences children have in their classrooms at our school ... children learn that writing should be accurate and that they have limitations" (p.290).

Champelle and Justin were not reluctant writers, and, in fact, enjoyed writing. When asked if they liked writing, both children responded enthusiastically "yes!" Champelle began to sing out loud during her interview, "I love to write, I love to write." During lessons the children's approximations were praised by the teacher, and they understood the shared nature of the instructional task. Eileen interacted with both children differently as evidenced in the data display charts in chapter four. She respected individual difference in their ability to process and provided support they needed to be successful. They utilized the behaviors they learned in Reading Recovery as tools that helped them be successful in journal writing in the classroom.

The classroom teacher in this case provided a context where children were allowed to explore language and print and their approximations were valued. I would argue that if children from Reading Recovery demonstrate reluctance to write, that the expectations of the classroom context or how the Reading Recovery teacher is interacting with the students should be considered. The Reading Recovery programs of the two writers in this study provide evidence that the interactions do not shut down writers; rather, the students in this study flourished as writers.

Section IV: Implications

The findings of this study have a number of implications for the way children learn to write and writing instruction for at-risk learners. First, it documents that the scaffolded
learning experiences in Reading Recovery facilitated children's subsequent learning. It would seem that students at risk of failure, engaged in scaffolded interactions can make progress in writing, as revealed by the two students in the study. The students in this study were given opportunities to write for meaningful purposes, and were not required to complete the decontextualized literacy tasks found in most programs for at-risk learners (Johnston & Allington, 1991). Champelle and Justin moved within fifteen weeks from the lowest 20% of their class to the above-average group.

Vygotsky's (Vygotsky, 1978) concept of the social origin of higher mental functions was demonstrated in this study through documenting how the students' growth in writing shifted in relation to the interactions with their Reading Recovery teacher. The language and shared understandings that both teachers created supported the children as they built up the mental plans that facilitated learning to write.

The two students' differences illuminated the individual nature of how children make sense of instruction. Educators must not underestimate children's ability to reconstruct learning and must not mistake scaffolding as mirrored one-way socialization. Teachers who utilize scaffolding with at-risk learners, must consider the individual characteristics of the learner and observe closely the sense the child is making of the learning interactions. Clay (1991b) challenges educators to try to "understand children's understandings." Although simply put, this statement is powerful and helps explain why close monitoring of children's progress is necessary for teachers to provide customized support and instruction. During this study, Champelle needed more explicit links than Justin. Eileen was able to provide these links because she sought to understand Champelle's understanding's as evidenced by her classroom literacy behavior.
The differences imply in order for children to develop self-regulation in writing, some children may need explicit links between the expectations of the context of the tutorial program and the expectations of the classroom.

What might these links look like? As stated earlier, explicit explanations of the expectations of both contexts helped the students in this study. Those links came from both teachers working as a team. This implies a shared responsibility on the part of all teachers involved in the teaching of at-risk students. Responsibility cannot depend on the tutorial teacher; rather, shared responsibility must be assumed and lines of communication must be established between the teachers and students. Students in Reading Recovery enter classrooms with differing reading programs. Reading Recovery teachers must work together with the classroom teacher and help children apply the understandings learned in Reading Recovery in the classroom.

The second implication of the study related to teaching at risk learners to write. Research over the past decade documents the type of literacy activities children participating in special programs must endure: non-meaningful, decontextualized, isolated drills (Johnston & Allington, 1991). Further, writing tends to be neglected in early literacy programs for special needs children (Chase Thomas, 1996). Donald Graves asserted that these students typically work on skills in isolation, and although progress on those individual skills may be achieved, the students often do not recognize the functions of the skills or how to incorporate them into authentic writing (Graves & Montague, 1991).

In this study, the classroom setting fostered the children's perceptions of themselves as writers. The environment embraced language as authentic and holistic, and encouraged purposeful uses of language through collaboration while writing and sharing finished products. Through journal writing the students were given opportunities to
express individual thoughts and ideas and to experiment with language in a purposeful manner. They wrote in various genres as a form of communication and to learn information. Writing helped them develop critical and creative thinking skills. Justin’s phase four journal in Table 15 demonstrates these opportunities. He wrote about the Mina bird in the classroom. He knew the class fed the Mina bird dog food, and hypothesized that is why the bird was so noisy. He wrote, “I’m a bird. I scream because I eat dog food.” Then he drew a picture of the bird flapping its wings and screaming. When Kate read his writing, she laughed and responded genuinely, “Mo (the Mina bird) does eat dog food, but when does he usually scream?” Justin answered, “When we get loud.” Kate responded, “Yes, Mo gets loud when we get loud.” Justin made sense of his environment in a meaningful way through writing and receiving an authentic response from his teacher.

Kate, the classroom teacher, embraced and celebrated individual differences during journal writing. Often, the children would cheer for each other when she praised them for their efforts and growth. During one observation, a child was praised for simply hearing and recording the letter B, while another child received a round of applause for remembering to use spaces when he wrote. Differences were embraced, and individual growth was the focus of all instruction.

The results of this study indicate this type of environment impacts at-risk students’ ability to write in a positive manner. Journal writing proved to be an excellent vehicle for allowing individual strengths and needs to surface and allowed the teachers to respond with more precise instruction. Thus, holistic meaningful writing events, such as the ones described in Kate’s room, may serve an important instructional role in the programs for at-
risk learners. The progress of both children documents how powerful journal writing can be for emerging writers as they struggle with the complexities of using text to express themselves in their classroom.

**Directions for Further Research**

A number of directions for further research come from the results of the study of how children reconstructed scaffolded instruction from Reading Recovery into independent writing. Clearly, the classroom context that the teachers in this study created, facilitated the children's growth in writing. How social context shapes developing writer's behaviors needs further exploration. The teachers in this study had to actively help Champelle make links to the new context, and when she did, she relied solely on those behaviors she learned. Examining the type of links Reading Recovery teachers need to make to help children utilize what they learn in lessons during classroom writing.

The word analysis behaviors in the writing portion of the lesson needs to be analyzed further. The teacher shifted or “upped the ante” on the children in each successive lesson: how the child responded to the challenges and how their independent writing shifted in relation to this phenomenon. Justin clearly became more adept at word analysis over time, but exactly what and how Eileen scaffolded must be analyzed further.

Additionally, the children in the study were never given opportunities to analyze words independently on the practice page without the support of sound boxes. I think this change in the way the teacher scaffolds the writing behavior is important for children learning a writing process in their Reading Recovery programs. This shift in teaching may facilitate children constructing a writing process that they may use in other contexts like classroom writing. Children must begin to control more of the word analysis
behaviors without the support of the sound boxes drawn by the teacher. This means the scaffolding behavior of the teacher shifts from drawing boxes to supporting the children through encouraging approximations and then directing the child to monitor and correct their attempts. The importance of these opportunities in children’s developing writing process in Reading Recovery must be explored further.

Limitations of the Study

Attempting to describe what children are thinking and doing may be quite difficult. As an adult engaged in any qualitative study of behaviors, one must acknowledge that children think and act in different ways than adults. They have a subculture of their own with ways of knowing that are different than adults (Fine & Sandstom, 1988). Children are capable of thinking and acting without the level of language to communicate what they are doing consciously (Bruner, 1983). Therefore, I can only make inferences from the talk, behaviors and products the child produces in order to map shifts in behaviors, and I do not assume this represents what the child fully understands about writing.

Many behaviors the students exhibit during independent writing may be related to home or classroom learning opportunities and not directly to the Reading Recovery intervention. Therefore, a direct causal relationship cannot be inferred from the data.

Finally, children’s literacy acquisition may follow many different paths. The description of a “median” score on quantitative studies does not allow the complexities of literacy acquisition to be studied, or provide information on the uniqueness of children.
The study did not seek to generalize results to the entire Reading Recovery population, but rather described how an instructional technique, scaffolding, may influence subsequent writing behaviors of children.

**Conclusion**

The findings of this study demonstrate how scaffolded instruction in one context may impact subsequent behavior in another context. Time, explicit links, and the individual nature of children surfaced as important factors in children's ability to construct flexible mental plans for writing. The children and the teachers who participated in the study offered the reader an opportunity to view how these factors surfaced as two children developed as writers over a twelve-week period. Eileen summarized quite succinctly the power of engaging in research that highlights an individual student's growth.

I think every child you work with teaches you something about yourself as a teacher and about children. Every child is different. What you need to do to help children is different, you must look at where they are and where they need to go and consider their own strengths and weaknesses. This forces you to take some responsibility for their learning. If you're not seeing the kind of progress that you expect, it forces you to think how are you going to change so that it happens.
APPENDIX A

LETTER OF CONSENT
Letter of Consent

Date

Dear

In cooperation with their classroom teacher and Reading Recovery teacher, your child, _________________, has been selected to participate in a study of how children learn to write. The study is a dissertation conducted under the supervision of Dr. Carol Lyons at the Ohio State University. The study is Children Reconstructing Scaffolded Instruction From Reading Recovery.

The study will take place during your child’s Reading Recovery program and in the classroom. No change to any of the regular programs your child participates in at school will take place. All of the information gathered will be kept confidential and used only for research purposes to help teachers learn more about children’s writing.

During your child’s Reading Recovery program, that lasts approximately 12 to 20 weeks, your child will be video taped once, and audio taped two times weekly during their normal lessons. I will also observe your child in the classroom while writing in their journal once a week. Additionally, I will conduct six short interviews with your child and ask them to write stories to share with you at home or their friends. I will be contacting you at the end of the study to discuss anything you might observe at home regarding their progress in reading and writing.

If you have any question please contact me at 486-1386. You are free to withdraw consent any time during the study. I look forward to getting to know your child and appreciate the opportunity to learn from their progress in school. By signing this document you indicate consent to your child’s participation and a copy will be sent home.

Sincerely,

Nancy Anderson
Graduate Student
The Ohio State University

_________________________ Date ______
Please sign here to indicate consent and return to School in the envelope provided. Thank you

_________________________ Date ______
Please sign here to indicate you do not wish for your child to participate in the study and return to school in the envelope provided. Thank you.
Reading Recovery
Teacher Interview

1. Talk about the writing portion of your Reading Recovery lessons.

2. How has your experience in Reading Recovery shaped your thinking about children's literacy development?

3. How would you describe the writing portion of the lesson to a classroom teacher?

4. For the student involved in the study, how do you think writing in the lessons may help them?

Classroom Teacher
Interview

1. Briefly describe the how you teach writing in your classroom.

2. Briefly describe the opportunities for independent writing in your classroom.

3. Please share any information you think is important about the children's writing behaviors who are participating in the study.

Parent Survey

1. How do you think Reading Recovery has helped your child?

2. Please describe any change in the child's reading or writing at home while participating in Reading Recovery?

3. Is there any other information you would like to share about your child or Reading Recovery?
Directions

The researcher will utilize a work space near or in the classroom and bring paper and pencil for the student.

*Say:* I want you to think about school, your family or friends. Write a story to share with them. It can be pretend or real. When we are finished you will get to read it to one friend in your classroom. When you are writing, I am going to write down all of the good things you do when you write.

If the student has difficulty with this prompt, provide examples below.

*Say:* Here is a real story I wrote
*Read from a handwritten paper:* Tonight I am going to a movie with my friend Christy. We love scary movies.

*Say:* Here is a pretend story I wrote
*Read from a handwritten paper:* I found a magic penny. It brings me good luck. Today I won a million dollars. I'm going shopping as soon as I can

Observe the student writing and record behavior.

If the student indicates they still do not know what to write say: Write a letter to your family telling them what you did in school this week.

No assistance will be given to the child.

If the student appeals for help during the writing, to spell a word for example, say: I want to see what you can do by yourself. Do your best. You try it.
Independent Writing Scoring Guide

<table>
<thead>
<tr>
<th>Words, Word Analysis, and Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Alphabetical (letters only)</td>
</tr>
<tr>
<td>2 Word (any recognizable word)</td>
</tr>
<tr>
<td>3 Word Group (any two-word phrase)</td>
</tr>
<tr>
<td>4 Sentence (any simple sentence)</td>
</tr>
<tr>
<td>5 Punctuated Story (of two or more sentences)</td>
</tr>
<tr>
<td>6 paragraphed Story (two themes)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language and Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Has a concept of signs (uses letters, invents letters, uses punctuation.)</td>
</tr>
<tr>
<td>2 Has a concept that a message is conveyed</td>
</tr>
<tr>
<td>3 A message is copied</td>
</tr>
<tr>
<td>4 Repetitive use of sentence patterns such as &quot;Here is a ...&quot;</td>
</tr>
<tr>
<td>5 Attempts to record own ideas</td>
</tr>
<tr>
<td>6 Successful composition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directional Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 No evidence of directional principals</td>
</tr>
<tr>
<td>2 Part of the directional pattern is known; start top left, or move left to right, or return down left</td>
</tr>
<tr>
<td>3 Reversal of the directional pattern</td>
</tr>
<tr>
<td>4 Correct directional pattern and spaces between words</td>
</tr>
<tr>
<td>5 Correct directional pattern and spaces between words</td>
</tr>
<tr>
<td>6 Extensive text without any difficulties of arrangement and spacing of text</td>
</tr>
</tbody>
</table>
APPENDIX E

SAMPLE DATA ANALYSIS PROCEDURES FOR DATA DISPLAY CHARTS
1. Codes were utilized to code each lesson observed (n=24) while viewing the videos and referring to the transcripts. This allowed non-verbal behaviors not captured in the transcripts to be taken into account during the coding process. The following is a sample coded lesson. Definitions for codes may be found in chapter three.

<table>
<thead>
<tr>
<th>Date</th>
<th>Behavior</th>
<th>Sub-category</th>
<th>Level of Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.16</td>
<td>SG</td>
<td>SG</td>
<td>^^^</td>
</tr>
<tr>
<td>10.16</td>
<td>Sometimes T</td>
<td>R</td>
<td>^^^^^</td>
</tr>
<tr>
<td>10.16</td>
<td>sometimes</td>
<td>WA</td>
<td>^^^</td>
</tr>
<tr>
<td>10.16</td>
<td>sometimes</td>
<td>WA</td>
<td>^^^</td>
</tr>
<tr>
<td>10.16</td>
<td>D</td>
<td>FW</td>
<td>^^^^^</td>
</tr>
<tr>
<td>10.16</td>
<td>I</td>
<td>S</td>
<td>^</td>
</tr>
<tr>
<td>10.16</td>
<td>T</td>
<td>RR</td>
<td>^</td>
</tr>
</tbody>
</table>
2. The lessons were sorted according to behavior, date, and level of control. The following is Transitions - Rereading for Champelle.

<table>
<thead>
<tr>
<th>Date</th>
<th>Behaviors</th>
<th>Level of Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.02</td>
<td>on</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>his</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>and</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>hat</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>put</td>
<td>RR</td>
</tr>
<tr>
<td>10.02</td>
<td>hair</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>like</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>ride</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>my</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>bike</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>at</td>
<td>RR</td>
</tr>
<tr>
<td>10.09</td>
<td>home</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>book</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>accident</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>I</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>my</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>rip</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>on</td>
<td>RR</td>
</tr>
<tr>
<td>10.16</td>
<td>a</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>butter</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>and</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>jelly</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>fix</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>my</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>own</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>10.23</td>
<td>peanut</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>had</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>party</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>ate</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>candy</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>a</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>at</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>school</td>
<td>RR</td>
</tr>
<tr>
<td>10.31</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>like</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>to</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>the</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>the</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>swing</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>P</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>to</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>park</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>set</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>go</td>
<td>RR</td>
</tr>
<tr>
<td>11.06</td>
<td>and</td>
<td>RR</td>
</tr>
</tbody>
</table>
11.06 swing T RR ^^^^^
11.13 played T RR ^
11.13 recess T RR ^
11.13 P T RR ^
11.13 was T RR ^
11.13 hokey T RR ^^^
11.13 P T RR ^^^
11.13 games T RR ^^^^^
11.13 at T RR ^^^^^
11.21 P T RR ^
11.21 my T RR ^
11.21 on T RR ^^^
11.21 P T RR ^^^
11.21 them T RR ^^^
11.21 dollars T RR ^^^^^
11.21 I T RR ^^^^^
11.21 spend T RR ^^^^^
11.27 whole T RR ^
11.27 class T RR ^
11.27 is T RR ^
11.27 having T RR ^
11.27 P T RR ^
11.27 eat T RR ^
11.27 P T RR ^
11.27 a T RR ^^^
12.04 my T RR ^
12.04 bed T RR ^
12.04 up T RR ^
12.04 in T RR ^
12.04 the T RR ^
12.04 morning T RR ^
12.04 P T RR ^
12.04 make T RR ^^^
12.12 Bartley T RR ^
12.12 put T RR ^
12.12 them T RR ^
12.12 on T RR ^
12.12 P T RR ^
12.12 was T RR ^
12.12 P T RR ^
12.12 fine T RR ^^^
12.17 to T RR ^
12.17 over T RR ^
12.17 uncle T RR ^
12.17 was T RR ^
12.17 fun T RR ^
12.17 swim T RR ^^^^^
12.17 my T RR ^^^^^
11.06 on T RR ^
3. Each behavior was counted and entered into another spread sheet to show change over time in specific behaviors according to level of control.

Transitions - Rereading

<table>
<thead>
<tr>
<th></th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.02</td>
<td>10.09</td>
<td>10.16</td>
<td>10.23</td>
</tr>
<tr>
<td>Self-Initiated</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Non-Verbal Prompt</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Verbal Prompt</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shared Control</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Teacher Control</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

4. Finally, another spread sheet was created with the totals for each phase. A data display chart was created for each behavior to visually illustrate how the behavior shifted over time. The following spread sheet and data display chart is for Transitions - Rereading and is Figure 8 in the chapter four.

<table>
<thead>
<tr>
<th></th>
<th>Self Initiated</th>
<th>Non-Verbal</th>
<th>Verbal Prompt</th>
<th>Shared Control</th>
<th>Teacher Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Phase II</td>
<td>15</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Phase III</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Phase IV</td>
<td>19</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Champelle - Rereading
REFERENCES


Barns, B. L. (1997). But the teacher went right on: A Perspective on Reading Recovery. The Reading Teacher, 50(4), 294-292.


