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IMPROVING READING COMPREHENSION INSTRUCTION:
A CASE STUDY OF A PROFESSIONAL DEVELOPMENT INITIATIVE

by

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ABSTRACT OF THE DISSERTATION

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Purpose/research question. Reading comprehension has been identified as one of the most pressing issues in literacy education. To date, most of the literature focuses on student learning and not on how to help teachers improve their reading comprehension instruction. This mixed methods case study examined how three 1st grade teachers responded to a professional development intervention aimed at improving reading comprehension practice. The research question guiding the study was: What happens when a professional development initiative engages teachers to scaffold students to use more explanations, predictions, and inferences? This question was examined in two ways. One line of inquiry focused on the teachers and how the professional development impacted their reading comprehension instruction. The second line of inquiry sought to examine the effects of the professional development on a small group of students' reading comprehension.

Methodology. The eight-week professional development intervention took the form of a professional learning group where the teachers and I met over 8 weeks for 30-

minutes to explore strategies to encourage student thinking about text. To examine the process and impacts of the professional development intervention, I conducted interviews, observations of teachers during the professional development sessions and in their classrooms, and collected various documents including lesson plans and weekly reflections. To ascertain the impact on students, pre and post-assessments were given to six focal students and all classes were given the Gates-MacGinitie Reading Test. In keeping with a case study design, multiple procedures were used to collect and analyze data. The data were transcribed, coded, and analyzed in order to describe the professional development intervention, each teacher's response to the intervention, and students' change in comprehension.

Findings/Implications. Each teacher's practice was found to change over the course of the 8 weeks of the intervention. The observed and reported changes were mediated by experience, knowledge of reading comprehension, and the design of the professional development. The findings of the study suggest that creating teacher professional learning communities around complex topics requires careful consideration of what it means to partner with teachers and how to use time as a resource that affords opportunities for teacher learning.

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Chapter 1

Introduction

A new student was reading a grade level passage of an informal reading inventory for me so I could check on his reading ability. He had no difficulty reading the text. When I asked him questions to assess his comprehension of the text, his response to one of the questions was, “How am I supposed to know what he’s thinking? I’m not him.” Matthew’s response surprised me. I thought, “Of course, you can know. You put yourself in the character’s place and try to think like him.” I realized that what seems like a natural way to think for some, may not be a way of thinking for others.

When children have mastered the skills needed to read fluently, it is assumed that they understand what they have read, but as in the example above with Matthew, not all fluent readers comprehend well (Dewitz & Dewitz, 2003; Valencia & Buly, 2004). As the demand on students to comprehend more complex texts continues to increase in each succeeding grade, students, like Matthew, will struggle and have difficulty meeting learning expectations.

The importance and complexity of reading comprehension has been repeatedly emphasized by the International Reading Association and literacy experts in research, position statements, and policy recommendations. For example, comprehension is one of five areas cited by the National Reading Panel (2000) as important in helping children learn to read. Moreover, as evidence of the importance of comprehension, the RAND Reading Study Group (2002), formed to identify the most pressing issues in literacy education, chose to focus on reading comprehension. This case study documents the experiences and responses of a small group of teachers who participated in a focused professional development initiative aimed at improving their ability to teach comprehension to young children.

Reading Comprehension

Reading comprehension is complex, in part, because text is not just speech written down (Purcell-Gates, 1995; Wood, 1998) but involves the reader extracting information from the text and using that information in combination with his/her cognitive resources to construct meaning. Speaking and listening usually involve face-to-face interaction between people where meaning can be enhanced or breakdowns in meaning can be recognized and mediated by the participants in the exchange through verbal and non-verbal means (Wood, 1998). Reading, on the other hand, is more abstract than talking because the responsibility is on the child to make meaning without the help of others. As a consequence, children often need instruction to learn to comprehend well.

To comprehend, readers interact with text to extract and construct meaning (RAND, 2002). To extract meaning, the reader uses language, phonetics, and other literacy skills and strategies he has learned to understand the black squiggles and illustrations of the text (Morrow & Tracey, 2007; Vellutino, 2003). The reader then combines the literal print meaning with his own knowledge of language, vocabulary, text structures, human nature, and related schema/background knowledge to construct and monitor meaning at the surface level and more importantly create a coherent representation of the text at a deeper level (Duke & Pearson, 2002; Grasser, McNamara, & Louwse, 2003; Pressley, 2000). This deeper level of meaning construction is where the reader infers, predicts, and explains what is happening with the characters and situations in narrative text, as well as gains insights beyond the text, such as the author's message for the reader (Allington, 2001; Dorn & Soffos, 2005; Pressley, 2000). As children extract and construct meaning from text, they must also be able to understand

the new and varied literary languages that are written discourse as well as meet the additional demands of text and context (Goldman & Rakestraw, 2000; Vellutino, 2003).

Comprehension is not simply an interaction between reader and text however. Reading also occurs within a sociocultural context. As children strive to communicate, they learn through social interaction with others within their cultural/historical setting (Vygotsky 1978, 1986, 1987). As Vygotsky (1978) wrote, “*human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them*” (p.88). The “intellectual life” of the particular family and culture in which the child is situated influences and shapes his/her development. It is through social interaction, both verbal and nonverbal, that children learn from their culture. As children learn language and use it to participate in their culture, they are also encouraged to think, speak, and interact in ways that are valued in their community. Through conversations, children learn when they can talk, what to talk about, what kind of questions to ask, and what kind of answers to give. Similarly, children also learn how to tell a story and how to respond to stories as a part of growing up within a particular culture. All of these ways of using language are internalized and affect the way children comprehend text (Gee, 1999, 2005).

Thus sociocultural contexts mediate the text, the reader, and the activity of reading. The text is influenced by the culture and background of the author and the choices made in the crafting of the text. Influences on the reader include the ways of using language and thinking, as well as the literacy practices that have been valued and learned within his/her culture. As a child learns to extract meaning from the letters, words, and pictures, cultural influences also show the child how to construct meaning. If

accuracy in reciting the words is emphasized, the child may not see reading as a meaning making activity. If texts are discussed and deeper meanings shared as they are read, the child is scaffolded into understanding and interpreting texts as those around him/her do. In other words, the experiences children have influence how they learn to comprehend text.

Reading Comprehension and Instruction

Reading comprehension strategies have been the focus of research since the 1980's. Observations of readers with good comprehension have led researchers to focus on comprehension strategy instruction based on the premise that if children can be taught the strategies used by effective readers, their reading comprehension will improve (Gambrell, Block, & Pressley, 2002). As a consequence, research has produced numerous lists of individual reading comprehension strategies used by good readers, which usually include self-monitoring, using schema, questioning, predicting/infering, imaging, summarizing, evaluating, and synthesizing. Research based instructional models or routines, which combine strategies, such as reciprocal teaching (Palincsar & Brown, 1984) or transactional strategies instruction (Brown, Pressley, Van Meter, & Schuder, 1996), have also been shown to improve reading comprehension. Strategic readers orchestrate strategy use in an integrated, flexible way to construct meaning (Dorn & Soffos, 2005; Palincsar, 2003). Therefore, researchers recommend that teachers teach fewer strategies, but teach them in combination with each other (Block & Duffy, 2008).

Comprehension strategy instruction tends to focus on teaching the strategy, almost as a skill, however some researchers are also considering the strategic actions of

students. The emphasis shifts from teaching the strategy to focus on how students are actively working on text, perhaps using strategies, to comprehend.

As we learn more about how comprehension works, we become more aware (1) that comprehension is more a matter of being strategic than of knowing individual strategies, and (2) that learning to be strategic is not a matter of progressing through a scope and sequence as we do with decoding. (Block & Duffy, 2008, p.29)

This view of comprehension strategy instruction reflects a growing awareness that comprehension is a “fluid process of predicting, monitoring, and repredicting in a continuous cycle” (Block & Duffy, 2008, p. 29). The difference between teaching a skill or strategy and teaching a student to be strategic makes reading comprehension and comprehension instruction even more complex.

However, while researchers continue to examine and refine their ideas about reading comprehension strategies and how to help readers learn to approach text in strategic ways, concerns about literacy instruction remain (Myhill, 2006; Pressley, 2000, 2008; Pressley, Wharton-McDonald, Mistretta-Hampston, & Eschevarria, 1998; RAND, 2002; Taylor, Pearson, Clark, & Walpole, 2000). What researchers advocate for effective reading comprehension instruction is not always seen in classrooms. Questions about the quality of reading comprehension instruction were first raised by Durkin (1978-79) when she found that teachers asked literal level questions approximately 70 percent of the time. Over 30 years later, most research finds that asking questions after reading a text is still the most common practice used by teachers (Block & Duffy, 2008; Myhill, 2006; Parker & Hurry, 2007). While this type of instruction checks for student understanding, it does not teach children how to construct meaning.

There is clearly a need to support teachers as they strive to improve reading comprehension instruction. However, there are also questions about the mode of literacy instruction. It may be that one of the difficulties with improving reading comprehension is the type of instruction that delivers it. Traditional forms of instruction tend to have the teacher telling students information and then sending the students off to read or work independently or perhaps in small groups. As previously noted, questions often dominate classroom comprehension instruction, usually in the traditional classroom discourse patterns where teachers call on students individually to respond to questions they pose about a text (Almasi & Garas-York, 2009; Cazden, 2001; Myhill, 2006; Parker & Hurry, 2007). This type of instruction often places students in a passive role.

Sociocultural views of how language mediates learning calls these traditional forms of instruction into question. From a sociocultural perspective, effective comprehension instruction must actively engage students in talk so that they can explain their thinking and discuss their ideas about what they are reading (Almasi & Garas-York, 2009; Brown, 2008; Wolf, Crosson, & Resnick, 2005). Engaging students in learning may be more important than the specific skill or strategy being taught (Chan & Cole as cited in Sweet & Snow, 2002). Being engaged or connected is also reflected by the research base on reading comprehension instruction, which advocates incorporating instructional moves that ensure that young readers are involved in practice during instruction, such as active participation where students turn and talk to a partner or guided practice where the teacher can scaffold students.

In many classrooms, teachers may teach reading comprehension strategies, however their mode of instruction often uses traditional classroom discourse, which

limits student talk and engagement. In addition to the mode of instruction in primary grades, reading comprehension instruction is also competing with “learning to read” skills, which often take precedence. Yet, the foundation for reading comprehension should be laid in the early grades (Duke & Martin, 2008; Paris & Hamilton, 2009; RAND, 2002). In order to address the documented gap between what the research base suggests young children need to learn to comprehend well and the pedagogies typically used by teachers, professional development is needed.

Reading Comprehension Research and Professional Development

As the RAND (2002) report states, “regardless of the quantity and quality of research-based knowledge about comprehension, unless teachers use that knowledge to improve their instruction, students’ reading achievement will not improve” (p. 47). To bring research-based comprehension instruction to the classroom, effective professional development is needed. However, the research base on how to prepare teachers to teach comprehension instruction effectively is limited. For example, when Anders, Hoffman, and Duffy (2000) examined the reading research base, they found that less than 1% of studies in reading education focused on in-service teacher development and education. Moreover, in many studies of comprehension instruction, researchers have provided the instruction rather than the classroom teachers (Dole, 2003).

Many reading research studies have trained teachers to implement a particular instructional strategy (Brown et al., 1996; Duffy et al., 1986) or several instructional methods with the aim of examining which method has a stronger impact on improving student comprehension (McKeown, Beck, & Blake, 2009). For example, in a two-year study, McKeown, Beck, & Blake (2009) compared two types of reading comprehension

instruction. One instructional focus was on using strategies to guide understanding when reading. The other approach focused students on content using open, meaning-based questions. There was also a basal control group. Researcher-developed scripts were used by teachers in all of the approaches. On most measures the content approach outperformed the strategies group. Studies like these add to our understanding of comprehension and instruction; however, a focus on student gains does not aid in understanding the long term effects of the intervention on teacher thinking or practice and provide little information on how to effect positive change in classrooms. While research is necessary to deepen knowledge of reading comprehension, research that informs how to support teacher change as teachers try to improve reading comprehension instruction is also needed.

Researchers interested in improving reading comprehension instruction through professional development have begun to draw on the work of change theorists, who advocate new forms of professional development (Borko, 2004; Easton, 2008; Fullan, 2007; Little, 1993; Putnam, & Borko, 2000; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). The concept of educating teachers so they are reflective practitioners rather than training them in a specific comprehension routine is being advocated for teacher preparation and in-service professional development (Anders, Hoffman, & Duffy, 2000; Block & Duffy, 2008; Duffy, 2004). Often professional development support has been given in the form of one-shot workshops where information is given to teachers without considering their needs or the context of their practice. In contrast, the newer forms of professional learning being advocated suggest that teachers work together in small study groups as they reflect on their own practice,

student work, and student learning, often within the context of whole school reform. This work takes place over time so that teachers have time to collaborate with each other and reflect as they focus on improving their practice in the context of their own classrooms. To ensure teachers begin to use new techniques or strategies, support is often given through outside facilitators, coaches, professional articles, demonstrations, and/or observations with feedback. It is assumed that the successful experiences teachers have in improving student learning through these professional learning groups facilitate ongoing instructional improvement (Fullan, 2007, Guskey, 2002).

This shift from isolated teacher learning opportunities to ongoing learning is important because understanding how to be responsive to student learning takes time. Teaching comprehension requires teachers to draw upon their knowledge of pedagogy and content to respond to a particular student, rather than follow a prescribed method or format, although there may still be a particular instructional approach advocated (Duffy, 2004).

Research studies using these newer professional development models, although few in number, have shown that newer forms of professional learning can have a positive impact on comprehension instruction and student learning (Gallimore, Ermeling, Saunders, & Goldenberg, 2009; Parise & Spillane, 2010; Quick, Holtzman, & Chaney, 2009; Sailors & Price, 2010; Taylor, Pearson, Peterson, & Rodriguez, 2005; Van Keer & Verhaeghe, 2005). Typically, these studies are large studies of change initiative that examine the professional development structure. However, these studies do not give specific information on the processes that contribute to teacher change.

Another group of studies has begun to focus attention on how to teach teachers to understand reading comprehension and become successful at teaching it. Using mostly qualitative data, these three studies describe the successes and difficulties teachers have implementing the method proposed by a group of researchers (Hilden & Pressley, 2007; Klingner, Vaughn, Arguelles, Hughes, & Leftwich, 2004; Stahl, 2009). For example, Hilden and Pressley (2007) describe the challenges that five 5th-grade teachers in two different schools experienced as they participated in a seven month professional development initiative to increase students' self-regulation of reading strategies. The researchers met with the teachers every four to six weeks to share information as well as reflect on the professional learning process. The professional development also included books on comprehension instruction, in-class demonstrations by the researchers as well as by the teachers, and observations with feedback. By working together over time and reflecting on student learning, the teachers felt more knowledgeable and confident in their comprehension strategy instruction. Even though the researchers saw growth in the teachers and students, they note that it often takes several years for teachers to become proficient at comprehension strategy instruction.

Similarly, Stahl (2009) examined the experience of three primary teachers in one school while they were participating in a larger study to improve reading comprehension by synthesizing cognitive strategies, vocabulary development, and responsive engagement. Stahl served as the professional development facilitator as well as the researcher for this study. The teachers took part in professional development study group sessions during eight months of the school year. The sessions included discussions of implementation, viewing and discussing video tapes of two teachers' instruction, and

lesson planning. The teachers were also interviewed, observed nine times, and given feedback. As Stahl explored the teachers' reactions as they implemented the synthesized comprehension program, she describes how the teachers expanded their approaches to vocabulary and comprehension strategy instruction. However, the teachers were not as successful at scaffolding students to participate in small group student-led discussions where they talk about text independently, which was also an aim of the intervention.

A study by Klingner, Vaughn, Arguelles, Hughes, and Leftwich (2004) sought to examine five teachers' responses as they implemented Collaborative Strategic Reading (CSR), which is a protocol consisting of comprehension strategies that are intended to improve comprehension of expository text. There were ten teachers in the study, with five teachers in two schools receiving the training and five teachers in three different schools acting as control teachers. The treatment teachers were given a full-day professional development session as well as in-class demonstrations of CSR. The researchers conducted pre and post interviews, three observations of the teachers, and also collected student data. The students in the CSR classes made greater gains than the control classes. The observation of the teachers showed variability in how each teacher implemented CSR. Two of the teachers seemed to understand and implement CSR close to the model. The least experienced teacher, who was in her first year of teaching, implemented the steps, did not exhibit the depth of understanding needed to implement the strategies well. The most experienced teacher seemed to be least invested in the study and implemented CSR minimally, yet his students did well on the assessments, possibly due to his many years of experience. One teacher made many of her own modifications to CSR, focusing more on classroom management than fidelity to the implementation of

CSR. The researchers speculate that prior knowledge of CSR and compatible teaching style supported the implementation of the two most successful teachers.

Taken together this small group of studies focused on specific teacher learning and efforts to implement specific comprehension strategies show that professional development can have an impact on teachers' understanding of reading comprehension and instruction. However, given that there are so few studies on professional development and reading comprehension, not a lot is known about how to best support teachers as they learn to improve their reading comprehension practice. If researchers do not examine teachers' thinking in response to professional development and observe their attempts to implement changes in their practice, opportunities to find effective ways to influence teachers through professional development may be missed. Looking at teachers' thinking and seeing what they choose to bring to their practice in relation to professional development focused on reading comprehension may uncover some of the roadblocks to making changes in classroom practice and address the ultimate goal of improving students' reading comprehension.

The Purpose of the Study

This study sought to build on the limited research base on professional development focused on reading comprehension in the early grades by examining a small group of teachers' experiences as they participated in an ongoing learning group over the course of several months. Specifically, this report documents a mixed methods case study of first grade teachers involved in a professional development intervention aimed at improving the teaching of reading comprehension and noted the outcomes of this intervention on their instructional practices and student learning. The overarching

research question guiding this study was: What happens when a scaffolded professional development initiative engages teachers to scaffold students to use more explanations, predictions, and inferences? I approached this question in two ways. One focus looked at teachers and how the scaffolded professional development impacted their thinking and their reading comprehension instruction. The second focus was on a small group of students whereby I examined the effects of the scaffolded professional development on their reading comprehension.

In the following chapters the theory, methodology, and findings of this study are detailed. The second chapter reviews the literature on reading comprehension and professional development and the theoretical base for the study. The third chapter documents the methodology that was used. The results of the study are explained in the fourth chapter as I examine at the professional development, describe each teacher's reaction to the intervention, and explore the impact of the initiative on the students. In the fifth chapter, the implications of the study are discussed as well as future research that is needed.

Chapter 2

Literature Review

This study examines the intersection of reading comprehension and professional development to improve reading comprehension instruction informed by sociocultural theories and draws upon three bodies of literature. First I show how some of Vygotsky's (1978, 1986, 1987) theories of cognitive development lay the groundwork for comprehension. Next, I look at reading comprehension and the challenges of instruction to support reading comprehension. Finally, the research on professional development, particularly research on the newer forms of professional development and reading comprehension instruction, is examined.

Vygotsky and Learning

Vygotsky's (1978, 1986, 1987) sociocultural theories shed light on how children learn to master such complex activities as making meaning from text.

Vygotsky argued that each human being's capacities for being, thinking, feeling and communicating, although based in his or her biological inheritance, are crucially dependent on the practices and artifacts, developed over time within particular cultures, that are appropriated in the course of goal-oriented joint activity. (Wells, 1999, p. 135)

As children learn through social interaction with others in a particular community of practice (Lave & Wenger, 1991), it is not just the words or sentences that are acquired. Rather, how to think, act, feel, value, and communicate are also learned as a part of learning the discourse from those in their particular community of practice (Gee, 2005; Lave & Wenger, 1991; Wells, 1999). Thus, social interactions and culture influence children's learning in both verbal and nonverbal ways. The sociocultural context is considered to be so important to learning that Vygotsky argued that learning first takes

place on the social level and is later internalized and used by the child or the adult to mediate his/her own behavior or thinking. For Vygotsky, these influences lay the foundation for learning. Inherent in Vygotsky's theories is how language is used to mediate cognitive development.

Language use. From Vygotsky's (1978, 1986, 1987) perspective, language plays a powerful role in cognitive development. Through social interaction, children learn to use language as a tool, which is externally oriented, to communicate with others and have their needs met. Later, language is used as a sign, which is internally oriented, that children use to guide themselves. What a child has learned from others through social interactions becomes the basis for how he/she turns learning inward to learn from him/herself. As children learn to internalize language use, language becomes a mediating activity, which guides their behaviors and their thoughts.

The greatest change in children's capacity to use language as a problem-solving tool takes place somewhat later in their development, when socialized speech (which has previously been used to address an adult) *is turned inward*. Instead of appealing to the adult, children appeal to themselves; language thus takes on an *intrapersonal function* in addition to its *interpersonal use*. When children develop a method of behavior for guiding themselves that had previously been used in relation to another person, when they organize their own activities according to a social form of behavior, they succeed in applying in a social attitude to themselves. The history of the process of *the internalization of social speech* is also the history of the socialization of children's practical intellect. (Vygotsky, 1978, p. 27)

The internalization of language becomes a mediating activity to problem solve and organize the child's thought, which is the basis for higher thinking processes. One internalized use of language is reflection or verbal introspection. Instead of acting on or reacting directly to something, the response is inhibited and the child can reflect, plan, and choose his/her response. This verbal introspection is what children are expected to

do when reading. To fully comprehend, they are asked to do more than repeat the literal text. Readers must reflect on the literal text, their own background knowledge, and social knowledge and integrate these sources of information to construct meaning from the text. In this process, the child is using internalized language to mediate a response from the stimulus of the text that is not directly stated such as inferring, predicting, explaining, or synthesizing in order to construct meaning.

Zone of proximal development. Vygotsky (1978, 1986, 1987) theorized the optimum learning situation as taking place in the zone of proximal development, which he defines as *“the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers”* (Vygotsky, 1978, p.86). When working in this zone of proximal development (ZPD) or optimum learning situation, children are able to learn to problem solve just beyond the level that they can do independently because they are supported by a more knowledgeable other. Within the ZPD, it is important that the adult or more able peer understands how to collaborate with the child so that he/she is given enough support to be successful, but not so much as to interfere with learning. The support is lessened as the child becomes more independent. This type of support is often called scaffolding (Wood, Bruner, & Ross, 1976). Other researchers have described scaffolding in teaching as the gradual release of responsibility, where the teacher does more work initially and gradually releases the full responsibility of the task to the child as he/she becomes more able to do the task independently (Pearson & Gallagher as cited in Pearson, 1985).

There are several elements within the concept of the ZPD that should be noted because of their contribution to learning. Being involved in problem solving suggests an engagement with the topic to look for a solution, which is necessary for optimum learning. Engagement implies a connection to the activity where the learner attends to and wants to accomplish or learn the task. Young learners must be actively engaged in the process, not just observe or listen. Within the ZPD, the child is doing as much of the work as he/she can with the teacher or adult only giving the support needed for the child to be successful. In other words, scaffolding with the gradual release of responsibility within the ZPD is the underlying theory for guided practice.

To be successful, children often need additional practice with teacher support before they can work independently on a task or use a particular skill or strategy. Also implicit, perhaps, is relevance or the importance to the child of solving the problem. Understanding why they need to learn a skill or strategy or complete a task may motivate children to learn (Cambourne, 2002). They may not be motivated if they see the lesson as a pointless activity. There is also the potential for greater learning due to collaboration with others. The varied cultures and backgrounds within a classroom offer the potential for different ways of thinking about topics and problems, which can enhance learning as children work together and explore ideas and ways of problem solving (Almasi & Garas-York, 2009).

Vygotsky's (1978, 1986, 1987) sociocultural theories of language and cognitive development provide a foundation for this study. Children learn to use language to guide their thinking and comprehend as they engage in social interactions with those around them, but they also need scaffolded support for optimum learning. Attempting to

understand how students are using or not using language in order to support their continued development of reading comprehension within the ZPD is essential. This study tried to use these ideas to help teachers explore student thinking and learning as students interacted with text.

Reading Comprehension and Language Use

Sociocultural theories building on the work of Vygotsky (1978, 1986, 1987) have changed our understanding of reading comprehension. How the child is shaped by cultural influences as well as the social nature of learning that is embodied in these theories deepens our awareness of the complexities involved in the construction of meaning. Inherent in this understanding of reading comprehension is using language to construct meaning from text. While comprehension is an interaction between the reader and the text, the foundation for this construction of meaning is laid for children as they learn to use language from those around them. This interaction between reader and text is more complicated than conversation with others because the responsibility to create meaning resides within the child, usually without others to support him/her. Yet it is from the social interaction with others that the cognitive processes to comprehend are developed (Vygotsky, 1978, 1986, 1987).

This development can be seen in the work of Heath (1983) who conducted an ethnographic study of language practices in three distinct groups within a single community. Each of the three groups encouraged children to speak, think, tell stories, and learn in ways that were specific to their culture. As a result, language acquisition was very different in each culturally distinct community and had consequences for a child's learning once he or she entered school. Most successful were the children whom

Heath described as “conversation partners and information-givers” (p. 249). These children were not just surrounded by language or expected to take in and give back information, they were viewed as having ideas and thoughts of their own, which they needed language to express. This active role as a constructor of meaning is essential to learning for Vygotsky’s (1978) problem solver in the zone of proximal development as well as echoed in the descriptions of good readers today (Beck & McKeown, 2006; Duke & Pearson, 2002; Graesser, Singer, & Trabasso, 1994).

The active stance of bringing thoughts to interact with information can be seen in the descriptions of reading comprehension processes. Research and theories in comprehension and discourse processes (Cook & Gueraud, 2005; Kintsch, 2005; Long & Lea, 2005; Van den Brock, Rapp, & Kendeou, 2005) have focused on the active cognitive processes involved in comprehending.

...Reading is an active mental process, not a passive one of simply receiving information. Readers must engage with ideas and make sense of information...Connecting information throughout the course of reading enables the reader to build coherent representation. (Beck & McKeown, 2006, p. 21)

Readers must be active. They must learn to attend, remember, decide what is important, use sources of information, infer, build coherence, and integrate all of this to create a meaningful representation of what they have read. The difficulty of integrating these processes increases across word, sentence, and text levels. At the word level, knowing the meaning of the word or having a strong vocabulary are elements that support, but do not guarantee, good comprehension (Paris & Hamilton, 2009). At the sentence level, the proficient reader must use meaning as well as syntax to monitor for errors and construct understanding. At the text level, the integration task is greater. The reader must use information from the previously read sentences and background knowledge as they

continue to read and choose which information is important to carry over as they continue to read and build a coherent representation of the ideas in the text (Beck & McKeown, 2006; Graesser et al., 2003).

Graesser, Singer, and Trabasso (1994) describe this active approach to text as a “search for meaning” where the reader “constructs a meaning representation that is coherent ... [and] attempts to explain why actions, events, and states are mentioned in the text” (p. 371-372). Guthrie (2004) speaks of readers being cognitively connected to what they are reading, which facilitates deep comprehension. Guthrie (2002) also notes “students who are active, engaged readers will be high achievers even if they come from backgrounds with low income or low education in the family” (p. 382).

Using instruction to create active, engaged readers is essential. “A proficient reader attempts to explain *why*... Readers who consistently attempt to explain what the content means, rather than passively processing the text, understand the text better and at a deeper level” (Graesser et al., 2003, p. 90). In my pilot study of four-second graders (Griffin, 2005), the stronger comprehenders used language to explain and elaborate while the weak comprehender seemed satisfied to give literal answers most of the time. In their study of 40 third-grade students, Laing and Kamhi (2002) also found that average readers provided more explanations than below-average readers. Having to explain or elaborate their own thoughts can help children integrate their knowledge and deepen their own understanding of text (Siegler, 2002; Van den Branden, 2000). Comprehension monitoring and making inferences have been found to support comprehension at the text level (Cain, Oakhill, & Bryant, 2004). Children, who see their role in reading as an active one of seeking explanations or finding reasons for why things happen, seem to be

better comprehenders. Classrooms that value explanation may be able to create a culture that encourages students to be active, engaged readers.

Some children experience difficulty with comprehension processes (Beck & McKeown, 2001; Cain, Oakhill, & Bryant, 2000; Dewitz & Dewitz, 2003; Griffin, 2006, 2007). They often treat information as if it all has the same degree of importance or they may ignore some information, letting background knowledge or illustrations override textual information. Students who struggle with comprehension may fail make connections, generate inferences, or build explanations that create an integrated, coherent representation of the text. Often lower comprehenders tend to give literal answers and fewer explanations (Griffin, 2005, 2006, 2007). They do not seem to look for explanations, so their answers and retellings tend to have literal, surface information. In my experience, many of these students are often grouped in the middle or lower middle of the class and may not stand out as at-risk students.

Learning to use language to comprehend is complex. Many students, especially those who struggle to understand text, will need instruction to learn to connect with text in ways to construct a deep understanding. In order to help students become more engaged with text, explanation, in conjunction with prediction and inference, was chosen as an emphasis for this study because giving explanations seems to be powerful avenue to the creation of deeper meaning.

Reading Comprehension Instruction and Learning

Vygotsky's (1978, 1986, 1987) work has highlighted the importance of language and social interaction to learning. He also speaks to the importance of instruction to development.

A central feature...of instruction is the analysis of the child's potential to raise himself to a higher intellectual level of development through collaboration to move from what he has to what he does not have through imitation....It is also the content of the concept of the zone of proximal development....In school, the child receives instruction not in what he can do independently but in what he cannot yet do. He receives instruction in what is accessible to him in collaboration with, or under the guidance of a teacher. (Vygotsky, 1987, p. 210-211)

Instruction, then, is a powerful tool to lead students' learning through the ZPD. As students collaborate with their teacher and peers to learn what they cannot do on their own, they are gradually able to become independent users of the skill or new learning. Effective reading comprehension instruction is crucial for those students who struggle to comprehend.

Effective comprehension instruction involves several elements (Calkins, 2001; Duke and Pearson, 2002; Guthrie, 2002). First, the teaching point or skill the teacher expects children to learn is explicitly and clearly stated. Then, if as Vygotsky (1987) notes, a great deal of learning by children is through imitation, clear demonstration by the teacher is necessary so children can see what it is they are expected to do. Next, as implied in problem solving in the ZPD, the active engagement element of instruction involves children in trying out what is to be learned. The scaffolding or support in problem solving or learning, which begins with actively involving the child in the task to be learned, continues as the teacher provides additional guided practice for those students who need it. The support is just enough to provide some help for the learner without interfering with the learning and the responsibility is gradually turned over to the student (Vygotsky, 1978, 1986, 1987; Pearson & Gallagher as cited in Pearson, 1985). Finally, independent practice can help the student internalized the learning. Effective instruction

is essential to comprehension, but language and engagement also mediate learning during instruction in the child's ZPD.

Reading comprehension instruction and language. Language is the currency of classroom instruction. It is language that mediates learning between the teacher, students, and texts. The way language is used has the potential to increase or decrease the power of instruction to facilitate text comprehension.

Traditional classroom discourse. Discourse in traditional classroom lessons often takes the form of teacher initiation, student response, and teacher evaluation or feedback (IRE or IRF) (Cazden, 2001) and student responses are often limited to a few words. This form of discourse is seen in many classrooms and restricts students' use of language (Durkin, 1978-1979; Myhill, 2006; Parker & Hurry, 2007). While there are times when this discourse pattern may be appropriate, there are concerns with this form of discourse as the primary mode of literacy instruction.

One problem with this traditional classroom discourse pattern is that teachers often initiate discussions by asking questions with known answers or have in mind the direction they expect the discussion to go. These types of questions often imply there is one correct answer or one particular meaning to the text (Almasi & Garas-York, 2009). The level of questions also cues students to the type of information they are expected to think about or look for and this can shape their thought processes. If the teacher asks literal questions most of the time, students will focus on the literal elements of the text rather than search for or construct deeper meanings (Almasi & Garas-York, 2009; Duke & Pearson, 2002). As a consequence, questions in traditional classroom discourse often evaluate comprehension instead of teaching students to construct meaning.

The amount of talk time that whole group lessons allow individual students is also of concern, especially for students who need more practice to learn to use language to comprehend. The potential for talk to enhance students' learning and thinking is minimized when students are called on one at a time to answer questions and the rest of the class is waiting. Some children may be called on to respond several times while other children are rarely asked to talk. Many questions only require a one or two word answer, which also limits the need for students to formulate answers (Myhill, 2006). When children are asked open-ended questions their responses tend to be longer and more elaborate (Almasi & Garas-York, 2009). The expectation is that students will have to think and respond with thoughts of their own to construct meaning, not just give a predetermined answer.

Engaging all students as active participants during instruction enhances learning and is usually missing in traditional classroom discourse. In whole group lessons where discourse follows traditional patterns, the teacher controls and often dominates the talk in class conversations. This type of discourse puts students in the role of a passive listener. Some children may be listening, others may not. This negates the active role children should take in using language to learn and seems to assume that they learn by just listening. Guthrie and Wigfield (2000) believe

Desired outcomes of teaching, such as text comprehension ability, knowledge acquisition from text, and sustainable reading practices, do not result automatically in response to instruction. These outcomes rely on engagement as a mediating process. When engagement is sustained, outcomes will be positive. (p.417)

Thus, being actively engaged with text and in the learning task is essential. In order to increase the engagement of all students, teachers need to plan for more student talk and active participation in their lessons, such as using partner turn and talk.

The pervasiveness of the problems with traditional classroom discourse was highlighted in a study by Myhill (2006) who examined videotapes of 18 whole class lessons in three curricular areas for a total of 54 quarter of an hour whole class teaching episodes, as well as interviewed teachers and students. She found that “teacher discourse in whole class teaching provided limited opportunities for pupil learning” (p. 24). Over 60% of the questions were factual or had known answers and elicited closed responses in interactions that mirrored the typical IRE discourse pattern. Student responses to these types of questions tended to be short (in this study an average of four words) with few opportunities for responses to be extended. The teacher interviews revealed that they had an understanding of the cognitive skills and concepts to be taught, however, this knowledge was not evident in practice. Myhill concluded that

The low percentage of questions making links between prior knowledge and present learning and the relative paucity of process questions which give children opportunities to reflect and articulate their learning points to whole class discourse which is more oriented to teachers’ curriculum delivery goals than to guiding pupils towards greater understanding. (p. 35)

Interactive instructional techniques. Activities where student talk is increased and students have an active role to talk or explain their thinking increases engagement and understanding of text (Brown, 2008; Wolf et al., 2005). Howe (as cited in Myhill, 2006) describes how talk can accomplish this goal. First, as students are engaged in talk and encouraged to elaborate on their ideas, the potential for learning is enhanced by formulation or “the way talk can crystallize thought and shape ideas” (Myhill, 2006, p.

21). Next, students can also learn to use talk to reform and clarify ideas as they communicate them to others. Talk can then further enhance learning as it is used to give feedback or help students reflect on their learning. By supporting readers as they learn to talk to each other about texts, teachers can help students learn to comprehend and develop new ways of thinking. Later these types of interactions may be internalized by students to construct their own meaning from text (Vygotsky, 1978, 1986, 1987; Woods, 1998).

This interactive mode of reading comprehension instruction can be seen in several research-based practices. First, the talk during an interactive read aloud is one instructional practice where a teacher can demonstrate how to construct meaning by sharing his/her thinking as well as provide opportunities for all students to share their thinking. In a traditional read aloud, the teacher might stop and explain or call on individual students to respond or answer questions. However, an interactive read aloud is an opportunity for comprehension instruction (Lapp, Fisher, Grant, 2008). The teacher selects points during the read aloud to stop and explicitly demonstrate his/her thinking (Kucan & Beck, 1997). The teacher also plans several times for the students to turn and talk to a partner. These think aloud opportunities allow each child to gather his/her thoughts about the text and/or the prompts the teacher may give and express these ideas to a partner, which offers the potential to use talk for formulation, reformulation, communication, and reflection (Howe as cited in Myhill, 2006). By having students turn and talk to a partner, all students are responding to questions or queries in whole class settings rather than just individuals. Students must learn how to listen and respond to other readers as well as the text. They are surrounded by the thinking of other readers,

which models comprehension processes. Listening in to these conversations allows the teacher to monitor and then highlight thinking to scaffold the construction of meaning by the students. The teacher can shape the talk by the kinds of prompts he/she asks and gradually support the class as the students learn to have rich conversations with each other (Nichols, 2006). With the teacher's support, the students construct a shared meaning of the text while learning how to comprehend, which later can be internalized so they can independently create deeper meaning from text as they read on their own or participate in discussions with peers.

A second instructional technique is to use open-ended questioning. Questioning can be a way to explore student thinking and scaffold comprehension, but as mentioned previously, teachers often ask literal questions, which require a minimal response from the student. Alternatively, teachers may front-load questions by shaping the question, such as "What do you think the animals are doing in the picture?", so the students are directed to the answer that the teacher expects. Open-ended questions or queries, such as "What do you think?" or "What's happening here?" can allow students to explain what they are thinking. But even using open-ended questions, does not guarantee elaborated responses. In their research of read-alouds with kindergarten and first grade students, Beck and McKeown (2001) found that students may give limited responses and teachers will need to support the child or probe to elicit more information to help students learn to construct meaning. When the teacher knows what the student is thinking, he/she can respond in ways to scaffold their comprehension development. For example, if a student has a misunderstanding, the teacher can take them back to the text and help them construct meaning.

Third, scaffolding the construction of meaning during the reading by stopping to talk about the text is a structure used in several reading comprehension interventions, such as Reciprocal Teaching (Palincsar & Brown, 1984), Questioning the Author (Beck & McKeown, 2006), and Transactional Strategy Instruction (Brown et al., 1996). To help students who are having difficulty constructing meaning, use of a think aloud approach in a small group setting has been found to be helpful (Kucan & Beck, 1997). This strategy involves having the students read a portion of the text and stop to talk about what they are thinking. Having students read a few pages and stop to discuss what has happened or explore student thinking is one way to give additional support to develop comprehension. Using open-end questions when stopping allows students to elaborate and explain their thinking, which gives the teacher the opportunity to scaffold them. The teacher can note how students understand each segment of the story, how they are creating a coherent representation, and guide their construction of meaning. Internalizing the processes needed to comprehend and create a coherent representation takes time and many children need support in order to learn to make meaning from text.

Reading comprehension instruction. To help readers develop comprehension, many classrooms incorporate instruction that draws upon comprehension strategy research, which has generated various lists of reading comprehension strategies that usually include self-monitoring, using schema, questioning, predicting/infering, imaging, summarizing, evaluating, and synthesizing. However, strategies are not ends unto themselves, but a means to the end goal of understanding text. Chan & Cole (as cited in Sweet & Snow, 2002) explain that “the nature of the strategy taught seems less significant than the role that strategy instruction plays in engaging the reader in active

interaction with the text” (Sweet & Snow, 2002, p. 39). So for reading comprehension instruction to be effective, the instruction must engage readers so they learn to be strategic constructors of meaning.

Successful reading comprehension instruction lies in careful observation of readers and in using talk to responsively scaffold them. As the more knowledgeable other (Vygotsky, 1978, 1986, 1987), the teacher must observe children in their zone of actual development as they work to comprehend and scaffold them to use the appropriate strategy. For example, when children are reading, the teacher can prompt them to explain why something happened. If the students have misconceptions, the teacher can support their construction of meaning by taking them back to the text and show them how to connect background knowledge with the text to make the explanation. The expert teacher decision-making involved in scaffolding comprehension is developed over time as teachers become familiar with reading comprehension, effective instructional techniques, and ways to engage students in the process with talk. Reading comprehension instruction is more than just knowing what reading comprehension strategies are, it is knowing what readers are doing and not doing and how to prompt them to take the next step in learning to construct meaning from text. This study focused on this responsive instructional mode, which encourages the engagement of students with text and the exploration of student thinking during reading to scaffold the construction of meaning.

Professional Development and Reading Comprehension

The teacher is key to helping young readers develop comprehension. However, some researchers (Cuban, 1993; Stigler, Gonzales, Kawanaka, Knoll, & Serrano as cited in RAND, 2002) have found that, in many classrooms comprehension instruction has not

changed since Durkin's (1978-79) classic study. Just as Durkin found, questioning is still the most common form of instruction found in many classrooms (Almasi & Garas-York, 2009; Block & Duffy, 2008; Myhill, 2006; Wood, 1998). It is often difficult to change teachers who are entrenched in their established beliefs and practices (Fullan, 2007; RAND, 2002). Therefore, newer forms of professional learning that are grounded in theories of adult learning (Lave & Wenger, 1991; Vygotsky, 1978, 1986, 1987) are being advocated to help teachers alter their beliefs and practice to improve instruction.

Professional development. In order to support teacher learning and development, many districts adopt curricular material or have in-service programs for teachers to promote change in their schools. Professional development has typically been a one day or less presentation where information is delivered, usually in a lecture format. While this type of professional development can serve to provide information, often from experts, or reinforce district initiatives, it does not usually affect change in most classrooms (Easton, 2008; Fullan, 2007; Little, 1993; Putnam, & Borko, 2000; Wei et al., 2009). Fullan (2007) acknowledges how difficult change is to achieve because "existing strategies fail to get at the day-to-day meaning and motivation of teachers" (p. 29). Unless professional development finds ways to engage teachers to develop deeper understandings about teaching and learning, change will remain elusive.

To provide experiences that engage teachers and facilitate change, new forms of professional development called professional learning are being used (Borko, 2004; Easton, 2008; Fullan, 2007; Little, 1993, 2002; Putnam, & Borko, 2000; Wei et al., 2009). According to Easton (2008) professional learning is

powerful because it arises from and returns to the world of teaching and learning. It begins with what will really help young people learn, engages those involved in

helping them learn, and has an effect on the classrooms (and schools, districts, even states) where those students and their teachers learn.
(p.2)

Scholars of professional development and educational change argue that engaging teachers with colleagues to concentrate on student learning as one of the keys to facilitating improvements in instruction. There are different ways to structure these professional learning groups, such as inquiry groups or lesson study, but the various designs focus on similar learning principles: social interaction, time, and relevance, all of which involve reflection and have their roots in sociocultural theories of learning (Lave & Wenger, 1991; Vygotsky 1978, 1986, 1987).

Social interaction. One of the core principles of new professional learning groups is based on Vygotsky's (1978, 1986, 1987) idea that learning occurs first on the social plane before it is internalized and that language (both written and verbal) mediates behavior and thought. Newer forms of professional development draw on these concepts to enhance teacher learning. The social plane of the learning group, where ideas are discussed, presents an opportunity for teachers to learn from others and later internalize these ideas to use in their practice. As teachers share their thoughts and experiences, the assumption is that they can learn from one another because they bring a variety of ideas and points of views from their own backgrounds and classroom experiences.

At the same time, the community in which this social learning takes place also influences teachers' practice. The school where a teacher works and the culture within that school could be considered a community of practice (Lave & Wenger, 1991). Each school has historical and cultural aspects, which define and shape its members. Wells (1999) refers to "the resources of culture" that influence the members as: "... (a) attitudes

and values concerning what are worthwhile activities to engage in; (b) understanding of the practices involved in these activities; and (c) mastery of the relevant artifacts and of the procedural and substantive knowledge associated with their use” (p. 138).

Teachers are a part of an established community of practice and one of the difficulties in establishing new forms of professional learning is trying to change the current culture (Fullan, 2007). Richardson (2001) notes that, while teachers may like to collaborate on some levels, the independent and individualistic spirit of teaching in America may hinder the opening of classrooms to others. Traditionally, the teaching profession has been an isolated, closed door profession and many teachers may not want to deprivatize their practice. Fullan (2007) also sees deprivatization as one of the difficulties in trying to affect change and believes that social interaction with other teachers, which can expose teachers to new ideas and possibly open teachers’ practices to one another, is essential for change.

Coming together in teacher learning groups to reflect on common goals to improve student learning supports the creation of new communities of practice (Lave & Wenger, 1991). It is assumed that as teachers collaborate, they will begin to create shared values and understandings as participants in the practice of teaching. As teachers implement new concepts and techniques in the context of their own classroom, the community of practice provides a place to talk about what they have tried and receive feedback from their peers. By collaborating with others, participants can draw on the experiences and expertise of the group members and the discussions may create insights that may be greater than an individual’s own thoughts (Easton, 2008; Putnam & Borko, 2000; Vygotsky, 1978, 1986, 1987). By trying out these new ideas, teachers can make

informed decisions about what works to improve their practice, which can be the first steps to changing beliefs (Guskey, 2002).

Time. Time is essential for change. Guskey (2002) states that “change is a gradual and difficult process for teachers. Learning to be proficient at something new and finding meaning in a new way of doing things requires both time and effort” (p.386). New forms of professional learning have found that “teacher learning takes place over time rather than in isolated moments” (Cochran-Smith & Lytle, 1999, p. 258). Teaching is often a non-stop, multi-tasking job with many decisions being made instantaneously so having the time to examine and reflect on their practice may facilitate change in teachers’ practice. Teacher learning groups, therefore, typically occur over an extended period of time, which gives teachers time to try our new ideas, discuss the results with colleagues, reflect, ask questions, and refine the concepts in their practice. The time to go through this recursive process to see how new ideas work with students can impact teachers’ beliefs, which is essential for lasting change (Fullan, 2007; Guskey, 2002).

Mills (2001) discusses the benefits of time as she examined the lessons learned for professional development over the course of four years in a teacher study group in a professional development school. She found that initially the group conversations were sometimes on and sometimes off topic as the teachers talked about other school issues instead of the topic that was the focus of their inquiry, so they established an agenda that allowed time for both. Maintaining a focus on practice and how theory supported their inquiry worked better than privileging theory itself. Mills also believes that time was also necessary to build a sense of community and trust so that teachers would be comfortable sharing and discussing each other’s practice.

Relevance. The newer forms of professional learning are usually situated in teachers' practice because examining content or pursuing an area of inquiry through their students' work or their teaching practices makes what teachers are studying relevant to the context of their own teaching (Borko, 2004; Easton, 2008; Lave & Wenger, 1991; Putnam & Borko, 2000). Being able to draw upon their own practice also allows teachers to relate their current ideas to new ones and the understanding of both sets of knowledge is enhanced (Cochran-Smith & Lytle, 1999; Vygotsky, 1987). New learning that is situated in teachers' own classrooms is relevant because it is context specific. Teachers have the opportunity to try out the ideas in their current practice, bring their experiences back to discuss with the group, revise, and test the idea out again. When teacher learning is rooted in practice, it can lead to change because teachers see what works with their students and change in student learning is what impacts teachers' beliefs. "Demonstrable results in terms of student learning outcomes are the key to the endurance of any change in instructional practice" (Guskey, 2002, p. 384).

Focusing on student work is another way professional learning is being made more relevant (Easton, 2008). While teachers have always looked at their students' work for their own purposes such as grading, examining these artifacts with other teachers for the purpose of improving student learning or professional practice raises viewing student work to a different level (Little, Gearhart, Curry, & Kafka, 2003). One examination of how student work was used in professional learning groups is documented in a study conducted by Little, Gearhart, Curry, and Kafka (2003). In a two year study of four teacher groups, which were involved in three different reform projects, the researchers examined how these groups looked at student work as a way to improve instruction. The

researchers found that by focusing on student work the teachers brought and using protocols to guide the discussions made for richer conversations among the teachers. Focusing on student work also made use of subject matter, for example having to examine a student's writing in relation to the expected format of a persuasive essay. The groups also had to develop the ability to trust each other so that tough, challenging questions were a part of the discussion. There were three elements that seemed to interfere with using student work to deepen professional learning discussions. Sometimes a concern for colleagues kept the discussion of student work on the surface so as not to question or challenge other teachers. In other instances, the discussion focused on general topics and was not as helpful. At times, the teachers were uncertain about which student work to present and what to do with it. Therefore, Little et al. conclude that student work has the potential for improving instruction, but effective leadership is also needed to facilitate this group learning.

In summary, newer models of professional development are powerful because they increase teacher involvement, which reflects Lave and Wenger's (1991) idea of "learning as increased participation" (p. 49). This view emphasizes being actively involved and sees instructional practice as changing and evolving within the community of practice as opposed to receiving information in a lecture-style workshop. While there is a knowledge base essential for teaching, the focus for these teacher learning groups is not to teach novice teachers to do what the more experienced teachers do, but for all to learn from each other as participants in a shared practice. There may be different levels of participation as teachers choose what to use in their own practice, but the idea of scaffolding or understanding how to support new learning as opposed to just teaching

new instructional procedures may encourage increased participation and in turn, learning. Teachers, old and new, may need guided support to take on new learning. By studying student work, observing demonstrations, or receiving coaching with an emphasis on deepening an understanding of their craft, teachers can interact and experience new ideas firsthand. Giving the teachers the opportunity to step back and reflect, plan, and examine their ideas is fundamental to higher order thinking (Vygotsky, 1978). Vygotsky (1987) speaks of conscious awareness as, “To perceive something in a different way means to acquire new potentials for acting with respect to it” (p.190-191). Reflection, especially in the context of collaboration with others, often allows for new insights and new ways of relating to the student work or teaching practices that are being examined. As Lave and Wenger note, “the practice itself is in motion” (p. 116), which reiterates the idea that instructional practice should change as research gives new insights into student learning and teachers share and learn with each other in their community of practice.

Research on professional development aimed at improving reading comprehension. In general, research on professional development and reading comprehension is very limited. Research in the 1980’s and 1990’s often trained teachers to teach a particular intervention that researchers had developed to increase students’ comprehension (e. g., Duffy et al, 1986; Brown et al., 1996). While teachers in these studies gained in their understanding of comprehension, student results were often mixed, and instruction was not always what researchers hoped for. However, these studies did help researchers understand that translating research to teachers’ practice would take more time than they had previously thought (Dole, 2003). Researchers also found that

“reading instruction, especially comprehension instruction, was not a matter of following routine procedures” (Duffy, 2004, p. 6).

More recently, there have been several studies on professional development aimed at improving reading comprehension that have employed newer models of teacher learning. Some of this research on professional development has examined reading instruction at a whole school or district level (Parise and Spillane, 2010; Quick et al., 2009; Taylor et al., 2005). These studies have found that newer models of professional development have led to improvements in reading instruction over time. For example, the Center for the Improvement of Early Reading Achievement’s (CIERA) School Change Framework (Taylor et al., 2005) sought to improve reading instruction in 13 schools, which had used the CIERA School Change Framework for 1 to 2 years. The reform activities included a school leadership team with an external facilitator, whole and small group meetings, a focus on research, and the sharing of current practice and student data. The researchers examined data at the school level, classroom level, and individual teacher pedagogical practice. While there was growth in reading, they found that,

Growth in students’ reading scores as well as change in classroom teaching practices came in small increments from one year to the next. There were no quick fixes and no magic bullets in these schools – only hard work, persistence, and professional commitment. (Taylor et al., 2005, p. 64)

Other studies have examined professional development models to see what elements seem to support more change in instruction. For example, Quick, Holtzman, and Chaney (2009) found that an emphasis on curriculum or content that incorporated coaching was related to higher-level comprehension instruction. Similarly, a study by Sailors and Price (2010) determined that teachers in a professional development model that included coaching had better results as measured by teacher observations and student achievement

than teachers who did not receive the coaching. Information from these studies can add to the body of knowledge on professional development that supports change, but research is also needed on the teacher level.

Three studies were found that examined teachers' experiences in professional development in relation to reading comprehension. One study was a year-long quasi-experimental study of Collaborative Strategic Reading (CSR). Collaborative Strategic Reading is a set of strategies geared at improving students' understanding of expository text that has been used with students with learning disabilities, English language learners, as well as students in regular education classrooms. The strategies include brainstorming, predicting, monitoring, finding the main idea, and generating questions. The students work in small groups with roles, which are linked to the strategies.

Klingner et al. (2004) observed ten teachers in five schools. The teachers received training in CSR in a full-day professional development workshop, which incorporated how and why to teach CSR through the use of background information, videos, and hands-on practice. The teachers were asked to use CSR twice a week in their practice. During the school year, teachers were observed using a checklist and the teachers were given feedback. The teachers were also interviewed before and after the intervention. Student data were collected through the administration of the Gates-MacGinitie Reading Test and a think-aloud interview of students reading an expository text selection. It was found that students in the CRS classrooms did outperform the control group on the assessment measures and students in classes where CRS was used more often and implemented to fidelity tended to perform best. In their discussion, the authors correlate the teachers' implementation of CSR with teacher characteristics and

found prior experience with CSR as well as confidence in their classroom management to affect implementation.

The challenges and successes of three primary teachers as they implemented a synthesized comprehension instruction model within a larger study were documented in a qualitative study by Stahl (2009), who served as the researcher and professional developer. The eight month study model “incorporated vocabulary development, explicit strategy instruction, and responsive engagement within a lesson series construct” (Stahl, 2009, p. 337). The teachers received professional development in the form of a three hour session and six 90 minutes sessions across the school year. The session included discussions of articles, video tapes of two of the teachers’ classroom instruction where the discussion was guided by a protocol. Lesson planning was included in two of the sessions. The teachers implemented the intervention three times a week during their literacy block. The teachers were observed nine times over the school year and given feedback. Each teacher was also interviewed toward the end of the study. Stahl describes the teachers’ implementation of the synthesized comprehension approach and notes the successes and difficulties the teachers had. In general, they had the most difficulty with transitioning the teacher-led whole class conversation models to student-led conversations around texts. She also noted that teacher experience seems to play a role in how effectively the teachers implemented the approach. For example, it was easier for one of the most experienced teachers to integrate the three instructional components into her lessons while the least experienced teacher had difficulty combining the three elements of the synthesized approach.

In a qualitative, multi-case study to increase students' self-regulation of reading comprehensions strategies, Hilden and Pressley (2007) examined five middle school teachers' experiences as they participated in a seven month professional development program to improve their reading comprehension instruction. Working in two schools, the researchers established teacher learning groups, which met with one of the two researchers every four to six weeks. In the professional development meetings, information was given about reading comprehension strategies and scaffolding to support student learning. The researchers also demonstrated strategy use for the teachers. The teachers occasionally modeled for each other. Video tapes of expert teachers were also viewed and discussed. Some of the discussions also revolved around the challenges and successes the teachers experienced as well as supporting them to problem solve issues they faced.

Hilden and Pressley (2007) found there were nine challenges that teachers dealt with during the professional development study. First, the teachers had concerns about some elements of the intervention. For example, the teachers felt that the video example of classroom instruction portrayed an unrealistic view of teaching as compared to their practice. In addition, the teachers felt somewhat overwhelmed by receiving new information at each session. These issues were addressed during the intervention. The second challenge was dealing with the different attitudes teachers brought to the professional development, for example some were reluctant while others felt they did not need professional development. How to embed the reading comprehension instruction into their existing practice and instructional decision making was the third problem for the teachers. Fourth, it was sometimes difficult for the teachers to find appropriate, well-

written texts on the students' reading levels. The fifth concern was instructional challenges in relation to students, such as how to scaffold students to become independent in their strategy use. Classroom management was the sixth challenge teachers faced when they were working with small groups. Support for how to assess students was the seventh issue. The eighth concern was time for the teachers to read professionally as well as develop curriculum. The last issue was whether comprehension instruction would be continued for these students in the next year. While the teachers, as well as students, made progress, the authors concluded that it often takes more than one year to become proficient in strategy instruction or strategy use. They also believe one of the challenges for professional development is addressing the range of experience and needs teachers bring to the teacher learning group as well as the focus on improving student learning.

In summary, these newer forms of professional development offer ways to support teachers' change in beliefs and practices as they collaborate to focus on improving their instruction and student learning. However, employing professional development models to elicit the participation of teachers in their own learning is challenging.

This study adds to the small body of literature on professional development focused on teachers and reading comprehension by describing three first-grade teachers' responses to, and experiences in, a professional learning group as well as examining student learning outcomes. Drawing upon Vygotsky's (1978, 1986, 1987) sociocultural theories of learning, the study attempted to move teachers' understanding of teaching reading comprehension from the traditional question and answer format to exploring

student thinking in relation to text. By embedding the professional development in the teachers' practice, teachers were encouraged to participate as reflective practitioners as they thought about and tried out new ideas on reading comprehension instruction that were presented and discussed in the weekly meetings. In the following chapter I describe the methodology used for the study.

Chapter 3

Methodology

The aim of this study was to observe what happened when teachers were provided with scaffolded professional development to improve reading comprehension instruction. A case study approach was used so that teachers and students in the “bounded system” of the school and classroom could be studied “over time through detailed, in-depth data collection involving multiple sources of information rich in context” (Creswell, 1998, p. 61). Using qualitative and quantitative data collected over the course of three months, this case study sought to achieve two aims. One focus examined how teachers reacted to the scaffolded professional development as they collaborated with the researcher to improve reading comprehension during the implementation of the study. The other focus examined the effects of the scaffolded professional development on classroom instruction and on children’s reading comprehension.

Setting

The study was conducted in a public elementary school (kindergarten through third grade) located in a suburban community in New Jersey. The school has a diverse population of about 730 students. The ethnic make-up of the school is 20% white, 7% African American, 6% Hispanic, and 67% Asian/Indian. The class sizes range from 19 to 24 students. This site was chosen for two reasons.

First this district is committed to supporting professional development. In addition to providing district and building-level workshops, teachers are encouraged to attend out of district workshops of their choice and are committed to learning and growing as professionals. This district has had a particular focus on the Teacher’s

College reading and writing workshop approach developed by Lucy Calkins (1994, 2000). The writing workshop has been a district initiative for the last four years with a trainer coming four or five times during the school year to work with a specific grade level for two class periods. The training is now shifting to reading and the district sponsored a week-long reading institute through Teacher's College the summer before this study took place. The teachers are familiar with the writing workshop format, which is similar to the reading workshop format. The first grade teachers had worked together and modified the reading and writing workshop calendars to guide their practice. My professional development study attempted to build on this foundation as the teachers and I worked together to improve reading instruction, particularly comprehension skills.

The site was also chosen because I have worked in this school for six years as a Reading Recovery and reading support teacher and the principal was willing to grant access. As a Reading Recovery teacher, I work closely with the first grade teachers because my Reading Recovery students come from their classrooms. Working together to help at-risk students learn to read has helped us develop a good rapport, which facilitated participation in the study.

Participants

To determine the participants, I first talked with the principal and she wanted me to work with the four developmental first grades for the intervention. The developmental classes have students whose reading level in September ranges from emergent to early readers. An aide is also assigned to work in each developmental class for an hour and a half each day. Most of the Reading Recovery students and literacy groups come from these classes. As shown in Figure 1, three of the 4 developmental classes received the

Table 1

Selection Criteria

Selection		Treatment			Comparison
Name		Martha	Chuck	Nora	Bev
Experience		24	6	4	19
No. of students currently in Reading Recovery		6	0	3	3
No. of children in stanine groups on Comprehension section of Gates	6-9 stanines	11	10	10	12
	5 stanines	3	3	3	2
	1-4 stanines	6	6	6	6

Teachers. As mentioned previously, the principal suggested I work with the four teachers of the developmental first grades, which were Martha, Chuck, Nora, and Bev. Even though I did not choose them, the teachers represented a range of experience, gender, and each came into the study with his/her own beliefs and attitudes.

Martha has been teaching for twenty-four years with twenty-three of them in her current district. Her bachelor's degree is in elementary education with a few additional graduate credits. She agreed to be in the study and had a "knowledgeable already, but I'm happy to help you out" attitude and expressed her desire to keep learning.

Chuck has been teaching first grade for six years in this school. His undergraduate degree is in English with a master's in early childhood and elementary education. While he agreed to participate in the study and expressed interest in learning strategies to use with his struggling readers, Chuck approached the study with a somewhat resistant attitude. He noted,

I'm hoping it doesn't require me to change too much...honestly, I don't want it to be like I have to really look at the way I teach reading, I'm hoping it's just something that can naturally flow in...I like the way I do it...I'm kind of sick of the constant changing. (AT: C/Int/2-27-08/lines 164-170)

At the time of the study, Nora was in her fourth year of teaching. All four years of teaching have been in first grade in this school. Her undergraduate degree is in elementary education and psychology. At the time of the study, she was working on her master's in reading and language arts. Nora began as the least experienced teacher in the study with current knowledge of reading from her graduate classes but still working to apply that theory to practice and gain confidence in what she knows.

Bev, the comparison teacher, has been teaching for nineteen years. She has a bachelor's degree in English and elementary education. As an experienced teacher, Bev has a strong understanding of what her reading comprehension goals are for her students.

Students. I selected six students to provide a more in-depth look at how the professional development affected student comprehension. In order to compare students who received the treatment with those who did not, I selected students from two of the classes – one that received the treatment and the comparison class. In an attempt to have the student information come from somewhat similar classes, I matched one of the treatment classes with Bev's comparison class. To aid in the selection, I wanted to have a sense of the basic comprehension levels in the four classes, so the Gates-MacGinitie Reading Test (Gates) (MacGinitie, MacGinitie, Maria, & Dreyer, 2000) was given to all of the classes by their classroom teacher. The Gates is “an established standardized assessment frequently used with young children with documented psychometric properties” (Carpenter & Paris, 2005, p. 287). As can be seen in Table 1, Nora, Chuck, and Bev had a similar number of students in each of the stanine groupings on the comprehension section of the Gates. Nora and Bev each had three students currently in

Reading Recovery. So Nora's criteria most closely matched Bev's and therefore, Nora's class was selected to have the three treatment focal students.

Three students were chosen from the comparison class and three from the matched treatment class. To select the students, several criteria were used. The teacher ranked all of the students in his or her classroom from highest to lowest on reading comprehension. Scores on the comprehension section of the Gates were also examined in relation to teacher ratings and were then used to select a high, average, and low comprehender so the study would have a rich, varied sample (Miles & Huberman, 1994) of student comprehension in each of the two classrooms.

In addition to comprehension level, I considered other criteria. While I did not exclude students if they spoke another language, students who were currently receiving English as a Second Language pull-out instruction were not chosen for the study because it would be difficult to separate problems with using language to comprehend from learning English. Similarly classified students were not selected because if they had difficulty comprehending it could be related to their specific disability. Finally, students who were currently in Reading Recovery at the time of the study were not selected because decoding issues could interfere with comprehension.

The focal students' scores on the selection criteria are shown in Table 2. The pre-treatment Gates was given in February, so an average first grade student's score on the test would be 1.6 (first grade, sixth month). The high comprehending focal students were reading above grade level, the middle were reading at or slightly above grade level, and the low comprehenders were scoring below grade level on the comprehension section of the Gates. The teachers ranked the students from high to low in relation to the other

students in their class. The rankings placed the students in the top, middle, or bottom of their respective class.

Table 2

Gates Comprehension Scores and Teacher Ranking for Focal Students

Comprehension Level	Grade Equivalents/ Raw Score of Gates Comprehension Section				Teacher Ranking by Reading Comprehension (rank/total students in class)			
	Treatment		Comparison		Treatment		Comparison	
High	Sam	6.0 / 39	Anna	4.6 / 38	Sam	2 / 19	Anna	1 / 20
Average	Lisa	1.6 / 24	May	2.1 / 31	Lisa	7 / 19	May	10 / 20
Low	John	1.4 / 19	Zach	1.2 / 13	John	17 / 19	Zach	17 / 20

In the treatment class, Sam was selected to represent the high student. Sam was ranked second out of nineteen in his class for reading comprehension. He had perfect scores on the comprehension section of the Gates, indicating Sam was reading above first grade level with a grade equivalent of 6.0. Lisa was chosen as the middle student representative. Her teacher ranked her slightly above the middle of the class (seventh out of nineteen) for reading comprehension. She was ranked twelve out of nineteen in her class on the pre-treatment Gates on comprehension and scored on grade level with a grade equivalent of 1.6. The low comprehender was John, who was ranked seventeen out of nineteen in his class for reading comprehension. John had been a Reading Recovery student from September through February and while he made progress, he did not do well enough to be discontinued and still needed support. He was in a small group for literacy support from February through May, which I taught. He ranked sixteen out of nineteen

on the pre-treatment comprehension section on the Gates, placing him slightly below grade level with a grade equivalent of 1.4.

In the comparison class, Anna was chosen as the high comprehender. She was ranked at the top of her class for comprehension. On the pre-treatment Gates she was first out of the twenty students in her class when ranked by comprehension, scoring a grade equivalent of 4.6. May was selected to be the middle comprehender. Her teacher ranked her ten out of twenty in her class for reading comprehension. May ranked nine out of twenty on the comprehension section of the pre-treatment Gates, placing her slightly above grade level with a grade equivalent of 2.1. To represent the low comprehender, Zach was chosen. He ranked seventeen out of twenty for reading comprehension. On the comprehension section of the Gates, Zach ranked nineteen out of twenty, indicating he was below grade level with a grade equivalent of 1.2. Toward the end of the study, he received literacy support from a Reading Recovery teacher.

Treatment – The Professional Development Model

Newer models of professional learning are looking at ways to initiate change in teaching practice. Leaders in the field of professional development advocate a shift away from the one-shot workshop to what they call professional learning (Borko, 2004; Easton, 2008; Fullan, 2007; Little, 1993; Putnam, & Borko, 2000; Wei et al., 2009).

Professional learning engages teachers over time in studies focusing on a topic, usually of their choice, and using student work or other data to help them learn and to improve their practice.

While not as long term, this intervention sought to work with a small group of teachers and focus on reading comprehension. Three teachers, Martha, Chuck, and Nora

received the treatment while Bev the comparison teacher did not. The intervention focused on talk and reading comprehension and the eight weekly meetings provided opportunities for information to be presented and for teachers to share their thoughts. To do this, the scaffolded professional development had two components – weekly meetings and demonstrations. Here I provide a brief overview of the scaffolded professional development and explain it in more detail in the openings section of the findings.

In the weekly meetings, the three treatment teachers and I met in a quiet room before or after school at their convenience for 30 minutes. I tried to balance sharing ideas with teacher discussion. I presented information, shared transcripts, and did a demonstration to convey the ideas on improving comprehension. The topics that received the most attention during the weekly meetings were engagement through talk and small group instruction. The discussions were a place where the teachers could react to the new concepts as well as share their views and current reading comprehension practice.

For the second component of the scaffolded professional development, I offered to demonstrate instruction by teaching a whole group or small group lesson or conferring with students at the request of individual teachers. It is often helpful for teacher to view a lesson where they can sit back and see the teacher-student interactions and observe what we had discussed in action (Lyons & Pinnell, 2001). I worked with a small group of students in two of the classrooms. The first demonstration occurred when I unexpectedly had a free period during Nora's reading workshop and offered to teach a small group in her classroom, which was not during the classroom observation. The other small group

modeling was imbedded in one of Chuck's observation periods at his request. To describe this professional development intervention and its effects on teachers and students, I now turn to the data collection procedures.

Data Collection

In keeping with a case study design (Creswell, 1998), data were collected on each of the teachers and their practices through interviews, observations, and documents. To provide a description of the scaffolded professional development, a research observation notebook was used to record interactions in the weekly meetings and the classroom observations. To determine the effects of the program, test data and observational data were collected on each of the focal students. Field notes of the events were recorded on the page with my impressions and notations on the side of the page. All of the weekly meetings, observations, and interviews were also audio-taped and transcribed. A research journal was also used to document the interviews, my decision making, my reactions to the research experience, and memos of my impressions when transcribing and working through data (Merriam, 1998; Miles & Huberman, 1984). Table 3 summarizes the data collected in each of the three phases of the study. In what follows, each of the qualitative and quantitative methods is described in relation to where they occurred in the data collection cycle: pre-treatment, treatment, or post-treatment phases of the design.

Table 3

Time Table for Data Collection

Study Phase		
Pre-treatment February	Effects on Teachers	Teacher Interview (field notes and audio-taped)
	Effects on Students	Student Assessments (whole class assessment) - Gates-MacGinitie Reading Test (field notes and audio-taped) - Test of Problem Solving-Revised - Qualitative Reading Inventory-3
Treatment March - May		
	Effects on Teachers	Observation of Scaffolded Professional Development (field notes and audio-taped) - Weekly discussion - Modeling instruction Observation of Teacher Practice (field notes and audio-taped) - Classroom Observation Teacher Documents - Lesson Plans - Weekly reflection
	Effects on Students	Student Observation (field notes and audio-taped) - Imbedded in classroom observations
Post-Treatment May (also May, one year later)		
	Effects on Teachers	Teacher Interview (field notes and audio-taped) Teacher Document - Emailed questions
	Effects on Students	Student Assessments (whole class assessment) - Gates-MacGinitie Reading Test (field notes and audio-taped) - Test of Problem Solving-Revised - Qualitative Reading Inventory-3

Pre-treatment. Pre-treatment data were collected during the two weeks prior to the intervention with two aims in mind. One purpose was to gain an understanding of who the teachers were. The second goal was to get a baseline on children's

comprehension scores and to select children for the study. To collect this data I used teacher interviews and student assessments.

Teacher interviews. Before the professional development began, all four teachers were interviewed using a semi-structured interview protocol (see Appendix A). Standardized open-ended questions were used so that the answers could be compared across teachers before and after treatment (Patton, 1990). The purpose of this interview was to gain insight into the teachers' beliefs and understandings of teaching reading comprehension and literacy instruction before the intervention began. The interviews were conducted at a time convenient for the teachers (one before school, two after school, and one during a free period) and all interviews were conducted in their respective classrooms. Initial interviews lasted on average approximately ten minutes and were audio-taped. I also took field notes in my research journal to capture the responses and record the reactions and impressions I observed during the interview. The interviews were transcribed as soon as possible after they took place to ensure I captured the teachers' thoughts accurately. The data were organized by date and filed by teacher.

Student assessments. In order to look at the effects of the intervention at the student level, it was important to document the students' comprehension before the treatment began. So in addition to aiding in the selection of the treatment and comparison classes and students, the comprehension scores on Gates, which was given to the students in each class to provide a standardized baseline of the reading comprehension of each class, were also used to select the focal students.

For the other assessments, I took each student to my room, which is a quiet one-to-one setting, to collect the pre-treatment data. A narrative and an expository selection

from the Qualitative Reading Inventory-3 (QRI-3) (Leslie & Caldwell, 2001) were used to assess each focal student's comprehension skills. As students were reading, a running record was taken to assess the accuracy level to ensure that the passage was at an independent (95-100%) or instructional (90-94%) level. If the selection was too difficult for the student, assistance was provided. The narrative selection in the pre-treatment was read with one student. Since his comprehension was similar to the other students, I did not administer a lower level selection. Using the same reading selection provided a better basis for comparison between the students than having one student read a different passage than all the other students. Each student was asked to read the passage aloud, retell, and answer questions. The information gained from this is typical of assessments by reading specialists given to students to measure their reading comprehension. This assessment gave information on how much students remember of the texts they read (retell) and if they can recall specific information (explicit questions) and infer (implicit questions).

The Test of Problem Solving-Revised (TOPS) (Zachman, Huisinigh, Barrett, Orman, LoGuidice, 1994) was also given to each of the students. The test was designed to "assess a student's language-based critical thinking skills" (p. 17). For this assessment, the student was shown a picture and then asked to answer specific questions which included vocabulary, literal interpretation, and problem solving scenarios. In doing so, this instrument provided a window into each child's language use in a non-print format that draws on comprehension of a picture. While the test provides statistical and normative information it was not used. The quality of the response and language use, especially the use of explanation, was the focus for this task. Children's responses gave a

view of language use without the involvement of print as they expressed their ideas about the problems in the pictures.

The sessions for each focal student were documented through field notes in my research journal to capture the student's reactions. They were also audio-taped to ensure an accurate view of the student's language use, especially their use of explanation. The interviews were transcribed as soon as possible after they took place to ensure I captured each student's thoughts accurately. The data were transcribe, dated, and filed by student and classroom.

Treatment/Intervention. To collect data on the professional development intervention, I gathered observation using two techniques – field notes and audio-taping. Observations were also used to record student learning and teacher responses to the intervention. In addition, I also kept a record of my thoughts and decisions in my research journal.

Observation of professional development. The professional development took place during the next eight weeks of school. I recorded our weekly sessions in order to have an accurate record of what took place. I met with the treatment teachers once a week for about thirty minutes to discuss comprehension. The teachers and I sat in a quiet room around a small rectangular table, two on opposite sides facing each other, with my laptop at one end of the table and the digital recorder in the middle of the table. I attempted to take field notes in one section of my research observation notebook to record teachers' behaviors and reactions as well as my impressions of the sessions to one side, but I often found this difficult as a participant and would jot impressions in my notebook after the meeting.

As I facilitated the professional development weekly meetings, the sessions were audio-taped. The sessions were transcribed as soon as possible to provide an accurate description of the scaffold professional development and each teacher's reaction to it. As I transcribed, I also memoed by jotting brief notes about my ideas and interpretation of the data in my research journal (Merriam, 1998). The field notes of the weekly sessions were organized chronologically as a whole to give a complete picture of the professional development sessions. A copy was also placed in each teacher's file so the professional development could be linked to his or her practice during data analysis.

In addition to this I also went into two classrooms to demonstrate small group instruction. To capture times where I was teaching for teachers in their classrooms, I audio-taped and transcribed the sessions and supplemented them with my own reflective notes after the support lessons.

Observation of teacher practice. To gain insight into how teachers responded to the professional development workshop, I did classroom observations weekly whenever possible. I scheduled a time with each of the four teachers to observe in their classrooms during the reading portion of their literacy blocks. I saw the treatment teachers in action for the most part on a weekly basis. The comparison teacher was only observed four times due to scheduling conflicts.

During the observations of each teacher, I sat to the side of the whole group meeting area, small group, or conference where I could hear, but not interfere with the class. I took field notes in each teacher's section of my research observation notebook. My notebook was divided into columns where I recorded the conversations on most of the page and made notes on the side of the page of the seating, charts in the room that

were being used in the lesson, and my impressions (Marshall & Rossman, 1999). My observations focused on how the teachers were or were not implementing the information we discussed at the weekly meetings and the teacher-student interactions. In order to create a more complete picture from of the conversations, to see how reading was being taught, and to record the teacher-student interactions, the observations were audio-taped. As I transcribed the audio-tapes, I also included some of the information from my field notes, such as charts, in the transcriptions. I also reflected and wrote memos in my research journal to capture any insights or ideas that occurred as I transcribed audio data (Miles & Huberman, 1984). My research journal was also the place where I kept notes on my implementation decisions and my reflections on teacher and student responses to supplement the other data.

Student observations. Whenever possible, I took notes on the six focal students when I was in their classrooms during my scheduled time for the teacher observations. This data would allow me to look for any effects of the intervention on the students during the data analysis phase. I sat to the side, during the whole group lessons, with the recorder aimed at the group and took field notes. I tried to pay special attention to the focal students' interactions with the teacher. The student observations were imbedded in the classroom observations and transcribed as a part of the classroom observations.

In the treatment class, I observed small groups and conferences. For the small group lessons, I sat to the side with the recorder placed between the teacher and the students when possible and took field notes. For buddy and individual conferences, Nora would go to the pair of students who were on the carpet or at their desks to confer. I would follow and place myself next to or slightly behind with the recorder between the

teacher and students when possible and take field notes. During the seventh observation, I asked Nora to confer with the focal students to make sure I had data on each individual. On the average the students in the treatment class were observed in one small group, one buddy conference and one individual conference.

In the comparison class, I observed the focal students in one-to-one conferences because the teacher did not do small group instruction. For most of her conferences, Bev called individual students over to a round table. The student sat next to her and I sat across from them taking field notes with the recorder placed near Bev and the student. I specifically asked Bev to confer with the focal students in her third observation because I had not seen all of them in individual conferences.

Field notes in the research observation notebook supplemented by audio-tape helped capture the students' interactions and responses. The transcriptions of each student's observations were copied from the classroom observation and placed in their file.

Teacher documents. According to Merriam (1998), documents provide a written visual record, often "produced for reasons other than the research" (p. 112). As such, they can potentially provide a context for the study and serve as a cross-check between proposed and actual practice. One of the documents collected in this study was the weekly lesson plan that teachers routinely turn in to the principal and were not generated as part of the study. Each teacher gave me copies of their lesson plans for the eight weeks of the study. The lesson plan documents provided a record of teachers' thoughts and potential practice. The plans were collected to serve as a source to check planned instruction with observed instruction. I used them to compare my observation data with

the plan for that day and to learn about their instructional objectives for the week. They also provided another source of information about the context of the study and teachers' values and beliefs about literacy instruction (Marshall & Rossman, 1999). The plans were dated and filed by teacher.

In order to obtain the treatment teachers' individual responses to the professional development in a nonthreatening way, I also asked them to make weekly reflections. These researcher-generated documents were requested in an attempt to capture their individual thoughts and reactions to the weekly meetings throughout the treatment (Merriam, 1998). Each week in an email, I would comment on our meeting, thank them for their participation, and ask them in an open-ended way to reflect on the meeting if they had time. I always let them know that their reflections were helpful for me and I would also send a brief reply via email when I received their reflection. All of the teachers responded somewhat regularly to this request with a brief paragraph. Two of the teachers usually responded by email. One tended to write her reflections on paper. The documents were filed in chronological order in each teacher's file so they could be viewed with the other data for that week during data analysis.

Post-treatment. The post-treatment data repeated much of the pre-treatment data allowing me to compare and contrast information gathered before and after the intervention. In short, I re-interviewed teachers and re-administered the student assessments at this phase of the study. In addition, a year after the conclusion of the study, I also emailed the three treatment teachers four questions to document their perceptions of the long term effects of the study (Appendix B).

Teacher interviews. In order to note any effects the professional development had on the three treatment teachers' beliefs and understandings of teaching reading and to note any changes in the responses of the comparison teacher who did not receive the treatment, I asked all four teachers the same questions I had asked prior to the intervention (Patton, 1990). These questions were open-ended to elicit information about how the teacher viewed comprehension, how they said they teach for comprehending, and how they dealt with students who have problems with comprehension. I also asked the three treatment teachers additional questions to obtain their perspectives on the scaffolded professional development. The individual interviews were held before or after school or during one of their preparation period, whenever it was convenient for the teachers. We met in their respective classrooms for the interviews, which averaged about ten minutes in length. I took field notes in my research journal and audio-taped the interviews to capture the responses. The interviews were transcribed as soon as possible after they took place, dated, and filed by teacher.

In order to ascertain if there were any lasting effects of the professional development initiative, I emailed the treatment teachers questions a year after the study took place (see Appendix B). The teachers were asked about changes in engaging students in talk, using the small group structure and open-ended prompts, as well as how the study influenced their understanding of comprehension. The teachers' email responses were printed, dated, and filed by teacher.

Teacher documents. The documents collected in the post-treatment phase were researcher-generated in order to elicit the treatment teachers' perceptions of the long term effects of the intervention on their practice (Merriam, 1998). In May, a year after the

study, I emailed the three treatment teachers four questions relating to what I felt was reflected in my data analysis. The four topics focused on: using talk to engage students, using the read-stop-talk small group structure, using prompts such as “What do you think?” and the influence of the study on their understanding of comprehension. All three of the treatment teachers responded. The emails were printed out and placed chronologically in the teacher’s file.

Student assessments and interviews. The Gates was re-administered by the classroom teachers to all four classes to allow for student and class comparisons with the pre-treatment scores. The QRI-3 and the TOPS were also re-administered individually to the six focus students for comparison to pre-intervention data on reading comprehension and use of explanations and literal responses. The individual student sessions were documented by field notes in my research notebook as well as audio-taped. After transcription, the data was filed by student and classroom.

Role of Researcher

My role as a researcher was enhanced by the fact that I was a colleague in the same school where the professional development took place, but this dual position also had its drawbacks. It was positive in the fact that I knew the teachers and I was used to being in the classrooms. No one saw me as an outsider. I had worked with the teachers’ students in Reading Recovery and had even taught some small groups in some of the classrooms for push-in literacy support. We had a collegial relationship and this served to facilitate their agreeing to be in the study. However, my role as a literacy teacher in this school was problematic for me becoming a researcher in these classrooms because now I was trying to be a non-participating observer rather than someone intervening in

literacy instruction. At the same time in my role as a researcher, I was even more aware of literacy practices that I was not in agreement with. For example, it was difficult to watch the whole group sessions where the teachers called on one student at a time and notice that many of the at-risk students were never called on. I had to be aware of my own biases about what I felt was good literacy practice and make a conscious effort to look at their reactions and the ways they incorporated the ideas from the intervention into their practice and not evaluate their existing practice (Grieshaber, 2001). Making reflective notes in my research journal helped me to keep my focus on teachers' reactions to the study rather than on differences in our understandings of literacy instruction.

Data Analysis

After the data were collected, they were transcribed and organized in computer files according to the particular focus – professional development, each teacher, and each focal student. The professional development data consisted of transcribed discussions from the weekly meetings with the PowerPoint slides incorporated into the transcripts. Observational and interview data were included in the teacher computer files. Quantitative, assessment task, and observational data for each of the six focal students (3 in one treatment class and 3 in the comparison class) were placed in the appropriate individual student computer file.

As recommended by Creswell (1998) the first phase of formal data analysis began with my reading and rereading the transcripts in conjunction with my field notes and research journal to gain a sense of the data set as a whole. As I worked through the data, I also jotted brief notes or memos in my research journal to portray the key concepts and ideas that seemed to be present in the data for the professional development experience,

each individual teacher, and each focal student as well as across each group. In my research notes I recorded my decision making so I could understand how I developed the criteria to include or exclude data from a category. As I read, I kept in mind my research question to engage teachers to scaffold students to use more explanations. One focus was to describe the scaffolded professional development, to see how teachers responded to it, and to see its effect on classroom instruction. The second focus was to examine the effects of the intervention on select students. Each of these purposes then became another step in the data analysis process as I first read and examined the data with the professional development experience and teachers in mind and then focused on the student data.

Professional development. During the second phase of data analysis, I focused on all the data collected about the professional development model and the teachers' participation in the weekly meetings. Initially I read over the transcript for each week along with my field notes and my research journal as I sought to describe the weekly professional development meeting for that week. I considered the rationale for the decisions I made, the topics we discussed that week, and the interactions that occurred as I summarized each week. The techniques I used during the weekly meetings and in the classrooms were also described to provide an account of the professional development. Then I reread the professional development data to focus on and code the teachers' responses to the intervention.

Participation in professional development. As I read over the transcript of each of the eight weekly professional development sessions, I focused on all the teachers' responses in the discussions that took place. I first listed the key concepts that seemed to

represent the ideas that were talked about in the eight weekly meetings. As I read over these coded responses, four codes were used to sort the data: Teacher Shifts (TSh), Current Teaching Practice (CTP), Comprehension Causes (CC), and Comprehension Issues (CI) (see Appendix C).

The next step in analyzing the professional development participation and response of every teacher was to summarize the codes in tables or matrices (Miles & Huberman, 1984). I summarized the coded information by teacher, week, and codes, which enabled me to look at which codes applied to the teachers each week. To see which topics were discussed most often, I tallied per week and across the intervention. I then compressed the information so I could see how many substantive comments were made by individual teachers each week. Organizing the data by teacher and week assisted in the search for commonalities as well as contrasts between the teachers and created a view of which teachers talked each week and how much. The codes and information summarized in the tables for the teachers' participation in the professional development weekly meetings also served as a resource when analyzing each teacher's individual data.

Teachers. The next step involved focusing on each individual teacher. I began with the interview data for each. I tried to gain a sense of the teacher's beliefs about teaching and reading comprehension. As particular themes emerged, such as a developmental belief to teach decoding before comprehension or the importance of personal connections, I coded the belief and looked for echoes of the conviction in the weekly professional development meetings. Then as I read through that particular teacher's weekly observations, I looked for evidence of how his/her beliefs impacted

instruction and if there were other philosophical ideas that were evident in practice. I then described each teacher in terms of his/her belief system.

As I coded the data from the weekly observations for each teacher, I separated the data by type of instruction – whole group, small group, and individual conferences. The codes (Appendix D) represented the instructional moves by the teachers and responses by the students. Each utterance or substantive responses on one topic were coded. For example, when Martha said, “Stop now after these two pages and tell me what you’re thinking...” (AT: M/Obs 3/4-4-08/line 352-353), the utterance was coded as What do you think? (WDYT?) because she was asking open-ended questions to elicit student thinking. To determine the validity of my coding scheme for the observations, I asked one of the reading teachers to check on my coding on three transcripts - one observation for each teacher, which included the different types of instruction. Any differences in coding were then resolved and the other sets of data were revised.

While the list of codes was large (see Appendix D), the coding of the different instructional events enabled me to look for patterns within each individual teacher’s practice. For instance, Nora tended to draw students attention to vocabulary, which stood out when looking at the coded lessons. After I coded each teacher’s data, I examined the first week’s observational data to gain a sense of his/her instruction before the intervention and in the case of Nora, after the first weekly meeting and summarized it.

Next, I read the data in relation to each teacher’s experiences in the weekly meetings and weekly classroom observations in order to see how each teacher responded to the professional development experience and to interpret if and how the ideas we discussed at the weekly professional development sessions impacted his/her classroom

instruction. As I read over the transcripts to develop codes and as I was working through each individual teacher's data, I was also able to see patterns across the lessons for each teacher. For example, the reoccurrence of open-ended prompts became evidence of each teacher's efforts to implement the idea exploring student thinking and encouraging explanation. The prompts were tallied in matrices by instructional events so that comparisons could be made across the whole group, small group, and conference settings in the weekly observations. At the end of this analytic phase, I wrote a descriptive portrait of each teacher that described his/her experience in relation to the professional development model.

Comparing across teachers. After creating a description of each teacher, I conducted a cross case comparison by looking across the teacher tables or matrices (Miles & Huberman, 1984), which displayed all the teachers' information together. These tables included their participation in the weekly meetings, and use of open-ended prompts in each instructional event – whole group, small group, and conferences. Then I looked across this information to compare the teachers' responses to the professional development. For example, I could note which teacher spoke the most and during which weeks. These comparisons added insight into each individual teacher's responses in relation to each other.

Student learning. To assess student learning, qualitative and quantitative data were used. However as there was not enough useful qualitative data, I chose to focus on the quantitative data. This data included the pre and post comprehension scores for the Gates, the retellings and questions for narrative and expository selections on the QRI-3,

and the pre and post responses on the TOPS as well as observations of focal students in literacy lessons.

I scored each of the pre and post tests of the Gates using the spring norms. The focal students' individual scores were taken from the class administered assessments and compared for any gain or loss from before and after the intervention. In addition to the individual scores, the class scores for the Gates were also analyzed. A one-way ANOVA, used to measure the differences between two groups, was run on the pre-intervention comprehension scores and again on the post-intervention scores for all four classes. Individual t-tests were also performed on each class' pre and post assessments.

To assess the students' retellings on the QRI-3, each selection was broken down into the turns or occurrences in the selection, or, for the expository selection, facts. The students' retellings were scored by the number of these turns or facts that they included in their retellings. The transcript of each student's retelling was then scored to see how many of the turns or details he/she included in the retelling.

To code the TOPS, I used the coding scheme developed through my previous work (Griffin, 2005, 2006, 2007) (Appendix E). I read and coded responses literal (L) for literal/factual responses, explanation (Ex) for responses that explain why, and elaboration (Elab) for responses that elaborate by giving examples. To determine the validity of my coding scheme, I asked the learning consultant to code the TOPS responses for all the students. When we disagreed on coding, I asked the reading teacher to discuss the coding with me to resolve any differences.

The results of the assessments were summarized in tables or matrices (Miles & Huberman, 1984) to compare the treatment and comparison scores of the high, average,

and low comprehenders in relation to one another and to look for any impact the intervention might have had. A summary of these results were created to describe the effects of the intervention on the focal students' learning.

The final stage of data analysis involved looking across the entire analyzed data set for "lessons learned" (Lincoln & Guba, 1985). I asked, what did all of this tell me about professional development, classroom instruction, and reading comprehension? In writing the findings, I give descriptions of the intervention, the changes implemented by teachers in their comprehension instruction, what teachers reported they learned from the experience as well as report the impact on focal students' learning.

Validity

Creswell (1998) describes validity in qualitative research as a process of verification that begins with data collection and continues during the analysis and report writing of a study. In this study, validity was ensured in three ways.

First, as I read through and across the coded data, I looked for information that triangulated across the different data sources (interviews, observations, discussions, documents) over the eight week time span (Creswell, 1998; Creswell & Miller, 2000; Mathison, 1988). Looking across these different sources of information provided a way for me to observe consistencies or contradictions (Mathison, 1988). For instance, the developmental belief that decoding should be in place before teaching for comprehension resonated through Chuck's interview, comments in the weekly meeting, and in his instruction. I also looked for patterns of behavior that echoed across the weeks and instructional events. Noticing similar interactions allowed me to document behaviors that reoccurred, which served to verify whether the belief or action was typical of that teacher.

Peer review of the coding schemes was the second procedure used to ensure validity. First, I asked another reading teacher to check my coding on the transcripts of one observation for each teacher and for one weekly meeting to verify my interpretations. The learning consultant coded the data on the TOPS using my literal, explanation, and elaboration coding scheme and the reading teacher and I discussed any sets of responses where there was disagreement to resolve the coding differences. In this way the coding schemes were checked for consistency and interpretation by others who were knowledgeable, yet not involved in the study.

Finally, to provide a way to check on my own responses during the study, I recorded the methodological and pedagogical decisions I made during the study and during the data analysis in my research journal. The research journal was also a place that I reflected on my own reactions, perceptions, beliefs, and biases in my role as researcher and as a peer of the participating teachers. My research journal also served as a data source to verify my decision making during the study (Merriam, 1998). In the next chapter the findings derived from this in-depth analytic process are presented.

Chapter 4

Findings

Change in classroom practice is difficult to achieve. Reform has often been attempted by making changes to standards and curriculum, but according to Fullan (2007) “Educational change depends on what teachers do and think” (p.129). In order to engage teachers and create change, it is necessary to think about how to help them develop professionally from where they are to where they might be. To do this, models of professional development are changing from one-shot workshops or presentations of a few hours where information is given to teachers without taking into consideration where they work and who they teach, to professional learning communities where teachers elect to be a part of focused study or discussion group to examine and improve their own practice. This kind of professional development occurs over a period of time so teachers have time to think and try things out, often guided by looking at student work and sharing from their own practice (Borko, 2004; Easton, 2008; Fullan, 2007; Little, 1993; Putnam, & Borko, 2000; Wei et al., 2009).

Drawing upon what the literature suggests is effective professional development, I implemented a scaffolded professional development initiative focused on helping a small group of teachers rethink their reading comprehension instruction. Reading comprehension is complex. Teachers must teach the skills needed to extract information from print as well as teach children how to construct meaning using that information. To extract information from print, children need to build a sight vocabulary, learn how letters and sounds work to be able to decode words, and self-monitor to make sure the sentence makes sense. To construct meaning from text, students need to be able to use

the information they extracted from print with their own language and background knowledge to build a cohesive representation of the story. Comprehension or making meaning also involves helping children go beyond the literal, surface events to infer or explain the deeper meaning that the author intended (Beck & McKeown, 2006; Cook & Gueraud, 2005; Kintsch, 2005; Long & Lea, 2005; Paris & Hamilton, 2009; RAND, 2002; Van den Brock et al., 2005). Given this complexity, it is not surprising that in each classroom there may be a range of comprehenders from fluent readers who struggle to construct meaning to children who have difficulty extracting information from print but comprehend well.

To teach comprehension, many teachers rely on the typical teacher initiation, student response, and teacher evaluation or feedback discourse pattern (IRE or IRF) (Cazden, 2001). An example of this type of classroom discourse can be seen in the following excerpt where Bev, the comparison teacher, is reading *A Baby Sister for Frances* (Hoban, 1964) to the class. Bev had helped the class understand that Frances was sad because she was not getting attention since the new baby was here.

- 1 Bev – (reading aloud) *Mother came in carrying Gloria. “Why are you sitting under the sink?” said Mother. “I like it here,” said Frances. “It’s cozy.” “Would you like to help me put Gloria to bed?” said Mother. (So now Mom’s asking her to help.) “How much allowance does Gloria get?” said Frances. “She is too little to have an allowance,” said Father. “Only big girls like you get allowances. Isn’t it nice to be a big sister?” (Now an allowance is money for doing chores and things around the house.) “May I have a penny along with my nickel now that I am a big sister?” said Frances. “Yes,” said Father. “Now your allowance will be six cents a week because you are a big sister.” (Do you think that’s a good thing? I think she thinks that’s a good thing, she gets more money.) “Thank you,” said Frances. “I know a girl who gets seventeen cents a week. She gets three nickels and two pennies.” “Well,” said Father, “it’s time for bed now.” Father picked Frances up from under the sink and gave her a piggyback ride to bed. How’s she feeling now? How’s she feeling now, May?*

- 2 May – Happy
- 3 Bev – Happy and how do you know she's happy?
- 4 May – Because she's smiling.
- 5 Bev – She's smiling at her dad. (AT: B/Obs 3/4-17-08)

As can be seen in this transcript, Bev used the IRE discourse pattern. First, after reading the passage, Bev initiated the conversation by asking a question and May responded (turn 2). Bev repeated her answer to affirm and the pattern of discourse was repeated (turns 3-5) when Bev initiated with another question. This type of interaction is useful for teachers because it helps them assess student understanding of text by asking students specific questions. But, this type of questions often elicits one word or short answers and is not always useful in exploring students' thinking or helping students construct meaning from the text. As in the example above, Bev could see that May knew the answers Bev expected her to give in response to the questions. However, when Bev had asked May how she knew Frances was happy (turn 3), Bev might have been looking for more evidence of comprehension, but she accepted May's answer, which seemed to rely on the picture where the character is smiling not the text. Bev did not ask May why or what made Frances happy, which might have shown more of May's thinking or how May used the text or her own knowledge to construct her answer.

Even with the current emphasis on comprehension strategy instruction (Allington, 2001; Dorn & Soffos, 2005; Duke & Pearson, 2002; Keene & Zimmerman, 1997; Palincsar, 2003; Pressley, 2002), many teachers approach comprehension instruction like Bev. While they may be modeling how they create meaning during instruction, comprehension is often limited to answering a question. According to many researchers students need to be actively engaged in the comprehension process (Cambourne, 2002; Duke & Pearson, 2002; Guthrie 2002, 2004). Helping students understand the thinking

they should be doing as they read can model the comprehension process for them. While teachers may model or teach a comprehension strategy, students may not receive enough guided practice (Duke & Pearson, 2002) to support independent construction of meaning. In the following example, when reading *The Nest on the Beach* (Smith, 2001) with three at-risk students, I attempted to explore student thinking by asking the students what they were thinking and prompting them to explain why to guide and support them in the construction of meaning.

All read text. *Meg and Grandma started to make a fence with sticks from the beach. But the bird was not happy. It still ran up and down and cried out. Its wings were down.* (p. 10)

- 1 Linda – Why is the bird acting that way?
- 2 Daniel – Because it might be...mad.
- 3 Linda – What would it be mad about?...
- 4 Mike – I'm thinking that they're going to try and hurt the eggs.
- 5 Linda – You think that's what the bird could be thinking?
- 6 All – Yes
- 7 Linda – Maybe...it's trying to get them away. Let's find out.
(AT: Sm gp model/3-18-08)

This process of reading a page or two and stopping to ask students what they are thinking and why can demonstrate to students that as readers they need to be thinking beyond the surface. In some ways, this process takes the think aloud to a guided practice level. It allows the teacher to explore student thinking and uncover misconceptions, which provides opportunities for the teacher to scaffold students' comprehension development. Open-ended prompting for reader thinking and explanations can provide a window for teachers to see if readers understand what happened in the story and why, which is thought to help children construct meaning from the text. However, most research shows that typical comprehension instruction, like Bev's, does not always include this kind of exploring and scaffolding of meaning.

This study sought to change comprehension instruction through a scaffolded professional development experience. As mentioned previously the research question was: What happens when a scaffolded professional development intervention engages teachers to encourage and scaffold students to use more explanations, predictions, and inferences? In this chapter I present the findings in response to this research question. To provide some context for the reader, I begin by describing what went on in the scaffolded professional development weekly meetings. Then I turn to individual teachers' responses to the scaffolded sessions, that is, I present Chuck, Martha, and Nora's own stories of participation and practice around reading comprehension during the time period of this study. Finally I examine whether the study affected focal student learning.

Scaffolded Professional Development

As mentioned previously this scaffolded professional development was structured around two components. First, it consisted of eight weekly meetings with the three treatment teachers. Second, teaching demonstrations were conducted in the classrooms. Infused throughout these two components, I used particular techniques that were intended to help teachers understand what comprehension instruction looks like in practice in a non-threatening and helpful way. The professional development was scaffolded in the sense that I tried to start with where teachers were because it is easier to learn when the distance between current knowledge and new knowledge is not too great (Vygotsky, 1978, 1986, 1987). I begin by focusing on the weekly meetings and then discuss the techniques I used during the intervention. As part of the discussion of techniques, I also

discuss demonstration because it was both a professional development strategy I used and also comprised the second component of the intervention.

The weekly meetings.

- 1 Martha – I’ve been working on this, too. Do your kids read...two or three pages and stop and think?...Not unless I’m...with them....They don’t do it on their own...It’s not a strategy that they use.
- 2 Linda – ...That’s really the power...trying to stop them and say, “What do you know here, what are you thinking?” And the reason that it’s good in a small group [is] then the kid who isn’t thinking sees other kids thinking, so there’s...a peer model...so they know what they’re suppose to be stopping and thinking about, especially in first grade...
- 3 Martha – Even if they do stop and think, a lot of it is still surface...it’s not that real deep thought yet... you have to scaffold it for them...You have to ask the right questions to get them to start thinking that deeper thought.
- 4 Linda – Well, I think in any grade the teacher has to be there to raise the level of thinking. (AT: CES 3/4-2-08)

The kind of talk that took place between Martha and I as the teacher and I were discussing a transcript in the third weekly meeting was a common characteristic of our weekly meetings. Conversations like this helped to clarify concepts we discussed in the weekly meetings as teachers tried them. Providing teachers with time to talk and reflect on new ideas is an essential element in trying to facilitate change because it allows them to be actively involved in the change process (Easton, 2008; Fullan, 2007; Hammerness et al., 2005). The weekly meetings gave teachers the opportunity to talk, reflect, share ideas, and voice concerns during the intervention as well as provided a place for me to present new ideas and listen to and respond to the teachers.

To facilitate these kinds of interactions, the thirty-minute weekly discussions were held in a quiet room located in the school before or after the instructional day when Martha, Nora, and Chuck could all meet. I provided refreshments to help make them comfortable and create a collegial atmosphere. This room and time provided a place for

me to share ideas in a low key way and for teachers to respond to these ideas and talk about their perspectives on reading comprehension and what was going on in their classrooms.

My previous work (Griffin 2006, 2007) had focused on working with small groups of students and having them read, stop, and talk. The students were also prompted to use explanations (used here to refer to predictions, explanations, and inferences) to take them deeper into text (Graesser et al., 1994; Pressley, 2002). I had found this read-stop-talk structure in combination with prompting students to explain to be effective because the readers had to go beyond literal information and infer why. Building on this work, the goal of this professional development experience was to help teachers elicit more explanations from students. I knew that the first grade teachers had worked together and modified the Teacher's College Reading and Writing Workshop curricular calendars (which are the suggested units of study for the year) to guide their practice, so I planned the topics for the weekly meetings to revolve around infusing explanation into the reading comprehension instruction in the reading workshop components.

As I began to observe in the classrooms, I found that the instruction was more traditionally based than I had realized. The teachers had taken pieces of the reading workshop, but not embraced the whole concept. For example, the teachers had students reading independently and conferred or worked with them in small groups, but did not follow the format of the mini-lesson with active engagement. So my plan for emphasizing comprehension in the components of the reading workshop did not seem appropriate with my theoretical model of scaffolded professional development. When

Vygotsky (1978, 1986, 1987) talks of the optimal learning experience, it is giving support as the learner learns to do something that is just out of his or her grasp. If the distance between what the learner knows and what is being taught is too great, it is harder to learn. In keeping with the idea of scaffolding (Wood et al., 1976) or providing support for the learner within the optimal learning experience and after initially observing in the classrooms, I felt that my original plan would be too far from the teachers' immediate practice. Focusing on comprehension in each component of the reading workshop might have changed the structure of their classroom for the length of the study, but it would have imposed a structure rather than allowing the teachers to make decisions about their own classrooms. Teachers need to have input into their own professional development if there is to be change (Fullan, 2007). The content for the weekly meetings, therefore, evolved from a combination of what I observed, what research supports, what I believed about comprehension instruction, and what I felt would be within reach of the classroom teachers and still hold true to the intent of the study.

As noted in Table 4, in the first week I began the intervention by explaining the rationale for the study, which developed from my previous work of engaging students with text by asking them to explain, infer, or predict. It took longer than I expected and there was little time for the teachers to talk. For the second week, I thought about what I had been observing in the teachers' classrooms and what I knew about what supports comprehension development. In the observations the teachers usually called on one student to answer a question or respond during read alouds and in small group instruction, which engages one student at a time. I wanted to encourage them to use partner turn and talk so all students would be actively engaged in talk during the whole

group lessons. Using talk in classrooms to increase student engagement is a powerful tool for learning because oral speech (Vygotsky, 1978, 1986, 1987) is the primary means by which a child's thought is shaped (Bruner, 1990; Cazden, 2001; Gee, 1999, 2005; Heath, 1983; Purcell-Gates, 1995; Vygotsky, 1978, 1986, 1987).

Table 4

Focus for Weekly Group Meetings

Week	Planned Topic	Actual Topic
1	<ul style="list-style-type: none"> • discuss comprehension and rationale for treatment 	<ul style="list-style-type: none"> • outline basis for the study with emphasis on explanation
2	<ul style="list-style-type: none"> • interactive read aloud 	<ul style="list-style-type: none"> • talk – IRE (initiate, response, evaluation), IRD (initiate, response, discussion), scaffolded interaction with text • small groups, prompts, engagement • transcript of 2nd grade small group
3	<ul style="list-style-type: none"> • mini-lesson 	<ul style="list-style-type: none"> • Engagement in Interactive Read Alouds and Reading Workshop • Small group • Transcript of small group
4	<ul style="list-style-type: none"> • mid-treatment – how's it going? 	<ul style="list-style-type: none"> • How's it going? • Transcript of small group
5	<ul style="list-style-type: none"> • small group 	<ul style="list-style-type: none"> • Engagement through explanation • Talk • Model traditional read aloud and interactive read aloud/engagement
6	<ul style="list-style-type: none"> • conferences 	<ul style="list-style-type: none"> • Engagement • Comprehension – surface/deep
7	<ul style="list-style-type: none"> • partnerships 	<ul style="list-style-type: none"> • Comprehension – surface/deep • Talk • Transcript with highlights
8	<ul style="list-style-type: none"> • conclusion – how did it go? 	<ul style="list-style-type: none"> • What did you think?

With this aim in mind, in the second week, I decided to share with the teachers information on talk (Cazden, 2001), explaining the traditional initiate, response, evaluation (IRE) and contrasting this with initiate, response, discussion (IRD) and other ways to engage students in more talk during instruction. I also talked about scaffolded interaction with text in small group instruction, which supports what students should be thinking as they read. I used a transcript of a second grade reading group from one of my previous studies that used the read-stop-talk structure as an example to make the ideas more transparent for the group.

As children must be actively engaged for optimum learning and “all learners...need to engage as deeply as possible with all the demonstrations the setting provides about reading and how it should be used” (Cambourne, 2002, p. 28-29), we returned to the issue of engagement through talk time and again. In subsequent weeks, I presented different opportunities for engagement to support reading comprehension in the reading block such as during the interactive read aloud, mini-lesson, small group, or conferences. Different engagement strategies, such as, turn and talk, open-ended prompts that emphasize student thinking, or the read-stop-talk structure, were also discussed. The goal was for teachers to actively engage all students through talk, therefore, engagement through talk echoed through five of the weekly meetings.

The third weekly meeting began by focusing on engagement in the interactive read aloud and reading workshop. Then I moved into a discussion of small group instruction, which we had touched on in the previous weekly meeting. We discussed small group instruction in more detail in this meeting because I had observed that the teachers had the students read most of the text independently and asked questions which

assessed their comprehension after they had read. The model I had been sharing with the teachers was the small group structure of read-stop-talk with an emphasis on explanation. As students read a page or two, the teacher stops them and prompts them by asking what they are thinking and why. By asking students to explain what they are thinking and why, the teacher can help the students go beyond the surface and deeper into the text (Graesser et al., 2003; Siegler, 2002; Van den Branden, 2000). This guided participation model allows the teacher to support students' thinking as they extract and construct meaning from text while they read, not later, after they have finished reading. A transcript of a first grade small group that I had taught in Nora's room, which used the read-stop-talk structure, was used to exemplify actual student work and we discussed it as we read through it.

Because it was difficult to balance the information being presented with time for the teachers to share, I opened the fourth week by asking the teachers to talk about how they felt things were going since this was the mid-point of the intervention. The teachers talked for about half of the session and I made a conscious effort to listen and not interject too much. I then responded to some of the things that were mentioned. We ended the meeting by looking at a transcript of one of Martha's reading groups reading *Nate the Great* (Sharmat, 1972) and we discussed the problems Martha's students were having and how she gave them support to clear up their confusions.

Before the fifth weekly meeting, I had not seen any shifts in the participating teachers' practices away from using the IRE style of discourse in their whole group lessons, so again I presented ideas on engagement through talk and reiterated the emphasis on explanation. I then demonstrated and contrasted a traditional read aloud

with an interactive one. The ensuing discussion touched on some of the benefits of the interactive read aloud as seen by Nora's comment.

- 1 Linda – So what did you think about the engagement part,...trying the turn and talk. This kind of talk... makes kids stay with you better and it forces them to talk.
- 2 Nora – Right, because then there's that definite accountability... You're going to talk about what you're thinking now. I'm going to stop and there's a time where you're going to have to share something so you need to be thinking about what's happening. (AT: CES 5/4-16-08)

We also discussed ways to support shy students and English language learners so they could effectively participate in turn and talk partnerships. Ways to organize students for partner work were also discussed.

In the sixth week, I revisited the engagement opportunities in interactive read alouds and the parts of the reading workshop in more detail. Information on surface comprehension, which encompasses decoding, sight vocabulary, and retelling was contrasted with deep comprehension, which involves word meaning, word usage, meaning beyond literal information, and constructing whole text and social meanings (Keene, 2003). These ideas sparked a discussion about deeper comprehension.

- 1 Linda – So I just wanted to bring that up because research says...that when we conference with high kids we tend to talk about comprehension. When we're conferencing with low kids, we focus on decoding... That's just something to keep in mind because we all slip back into it...they need decoding, but you've got to also make sure that you're hitting comprehension at the same time...it's...integration of those pieces...that is hard for them.
- 2 Martha – That's why I've been thinking about...starting them on the big books from the beginning and talking about the comprehension of the story...trying to get to some of the deeper understandings...and then worry about teaching the attack skills, the decoding...
- 3 Nora – I've been thinking about that, too. About starting sooner and even...linking...the whole story from the beginning...how does that relate to what's been happening. You know...and then you go back and why does
- 4 Martha – Why does this event happen? And because this event happened, what

- 5 Nora – happened?
 Specifically modeling that in the beginning, so that way, you can
 build from it. (AT: CES 6/4-24-08)

As can be seen, the group meetings gave these teachers an opportunity to think out loud about comprehension practices.

For the seventh weekly meeting, we reviewed some previous information, but most of the time was spent discussing the transcript of the small group I taught in Nora's room, which we had previously looked at. Using the transcript of actual student talk allowed us to examine the use of the open-ended prompts and student responses. By focusing on comprehension we were able to examine how students were understanding or misunderstanding text.

The eighth week was used to allow the teachers to reflect and talk about the scaffolded professional development study and process. While I guided some of the conversation by asking questions about their responses to the intervention, I let the teachers do most of the talking. This final session was an opportunity to discover how the teachers viewed the intervention experience.

Techniques Used in the Scaffolded Professional Development

During the eight weekly meetings I worked with the three treatment teachers in an informal, but structured way. I used three different techniques to shape the weekly sessions: presentation of information, transcripts, and demonstration.

Presentation of information. Typically I began each session by sharing ideas with the teachers using PowerPoint. While there was discussion in all of the weekly meetings, some of the weekly meetings, such as weeks one, two, three, and six had more PowerPoint slides with me talking about particular concepts and strategies that research

suggests should be used to improve comprehension. I believed it was important to present information in this way because I was trying to scaffold the teachers' practices by sharing what I had learned through my research studies to improve reading comprehension instruction.

At the same time, I also felt that it was important for the teachers to have opportunities to talk. Balancing the presenting of information with allowing time for the teachers to talk was sometimes difficult since our sessions were only 30 minutes in length. I tried to allow more time for them to share their ideas or react to the information I shared in weeks four and eight. Time for the teachers to talk was important. As Chuck expressed, "Sometimes I feel like I'm out on an island and that other people don't have similar struggles and problems, but hearing Nora and Martha talk this week make me feel pretty good" (Doc: C/refl/email/4-4-08). Talking with colleagues is an essential part of building a sense of togetherness and trust so that teachers feel a part of the group and are willing to risk opening up their ideas and their practice to others and join in the work of improving their teaching (Borko, 2004; Easton, 2008; Fullan, 2007; Mills, 2001; Putman & Borko, 2000). Our discussions often revolved around the information presented, what the teachers were trying, or their current practice.

Transcripts. Another strategy I used in 4 of the eight weekly meetings was the sharing of transcripts. Actual transcripts of teacher-student talk provided visual examples of student thinking and are an important resource because they allow teachers to examine instructional practice, which can be a powerful learning opportunity (Borko, 2004; Easton, 2008; Putman & Borko, 2000). It is often difficult to remember or sometimes

even hear everything that goes on during a lesson and the use of transcripts seemed to allow for reading, rereading, and reflection on the teacher prompts and student responses.

Three of the transcripts were of lessons I taught and were shared in weeks two, three, and seven. I thought that using my transcripts was less threatening for the teachers because as the focus of the talk would be on my teaching and not their instructional practice. During the fourth weekly meeting, I used a transcript of Martha teaching a small group where she discovered students' misconceptions and scaffolded their construction of meaning.

After discussing several transcripts during the weekly meetings, I felt the talk around the transcripts was staying on the surface and I was doing more talking and explaining than the teachers. For example, in week three, the discussion was about the kind of talk, but not the quality of talk.

- 1 Chuck – I like how they talk – “Because, well, if she ran after, like, if she...”
- 2 Linda – The problem is I talk that way too a little bit and you don't realize that you do until you transcribing
- 3 Martha – Until you're transcribing and listening to yourself.
- 4 Chuck – I like how they model you, too, like, you're like, what are you thinking? And they, that's what I'm thinking. They qualify everything.
- 5 All agree
- 6 Linda – Well, I thought on that section, at least I said, “Why do you think that's doing that?” because I think we're trying to get them to go deeper into the text...then at the end I was...trying to...say, “We want to be thinking about our title also.” Because they don't always use that information. So trying to model that...we're trying to use all the information we have. We're not just thinking about one thing and thinking about the next. That it's a continuous kind of thing.
(AT: CES 3/4-2-08)

For week seven, therefore, I decided to reintroduce a previous transcript of a small group I had modeled, as shown in Figure 2, but this time I highlighted some of the teacher prompts and student responses to bring more focus to the discussion.

Figure 2. Sample from a Small Group Transcript.

All read text: *Meg and Grandma walked along the beach looking for shells. At first they did not see the bird running across the sand. It was running very fast.*

Linda – So **what’s happening so far**, Sam? **What happened on this page?**

Sam – The bird is running across.

Linda – Hm, **why do you think it’s doing that?**

Mike – **Because, well, if she ran after, like, if she had her head bent (inaudible) chase birds**

Linda – Mm, hm

Mike – They would, it would be like running and then far away. That’s what I’m thinking.

Linda – That’s what you’re thinking? **What are you thinking**, Daniel?

Daniel – Um, **maybe it doesn’t want to, want to touch the water and the water’s going.**

Linda – Okay. **What are you thinking?**

Sam – I’m thinking it doesn’t want to go in the water so it has to run around very fast (inaudible)

Linda – Okay, right, and so we also want to be thinking, we’re still thinking of our title *The Nest on the Beach*. So Sam’s thinking the bird’s going to run to its home. We’re not really sure why it’s running, but we’ve got some good ideas. **Let’s read the next page and see if we can find out why it’s running.**
(AT: sm gp model/3-18-08/lines 25-41)

In using the transcript, I also attempted to change my prompting. Instead of opening the discussion with my own comments, I asked the teachers what they were thinking before I talked. This is the kind of conversation we had when discussing the transcript in Figure

2.

1 Linda – Any thoughts there?

2 Chuck – Well they seem to be thinking. All three of them are doing some, it’s not like in the beginning, they... all have some ideas. Especially the water one, it was the second person

3 Martha – “it doesn’t want to, want to touch the water”

4 Chuck – “want to touch the water,” that’s different. You know what I mean?

5 Martha – Did they just jump in with these ideas or did you just kind of look at them and they give you this?

6 Linda – This is...really the transcript, so I just asked, “What’s going on?”

7 Martha – What I wondered was...Sam said, “The bird is running across,” and

you said, “Why do you think it’s doing that?” ...were you directing it to Sam to get him to do deeper thinking on that one?
(AT: CES 7/4-30-08)

I deliberately used this transcript (Figure 2) to show an actual example of the read-stop-talk small group structure and emphasize the prompting. It seemed that the teachers were able to see how the prompts helped elicit student thinking and how asking why can take students deeper into text. Thus, using transcripts was one way to make the comprehension work being done by the teacher and the students visible so we could reread, reflect, and discuss.

Demonstration. Demonstrations are ways to “show how it is done” (MacNaughton & Williams, 1998, p.41). It is often difficult to conceptualize a new idea from information presented on a PowerPoint slide and the discussion around it or even from a transcript. A demonstration of the concepts in action was one way to make the ideas we were discussing clearer to the teachers. As mentioned previously, demonstration was used as a technique in two different ways in this intervention.

First, it was a technique used in the weekly meetings. For example, in the fifth weekly meeting, demonstration was used in the form of simulation to try and help teachers experience the power of engagement and talk. I had presented information about student engagement through talk in previous weeks, but I knew from my weekly classroom observations that most of the read alouds and whole group lessons continued to follow the traditional format of the teacher asking a question and then calling on a student to answer. By simulating a traditional read aloud and an interactive read aloud with me as the teacher and Martha, Nora, and Chuck as the students, my aim was to help them experience and reflect on the differences in the two types of read alouds from the

students' point of view (Lyons & Pinnell, 2001; MacNaughton & Williams, 1998). The teachers could also participate without being singled out or put on the spot. When I read the traditional read aloud I purposely called on only two of the teachers to highlight the issue of the student who is never called on during the read aloud. During the interactive read aloud, I had Nora and Martha work together and I partnered with Chuck for the turn and talk active engagement. Using simulation seemed to help the teachers experience the difference between the traditional read aloud and an interactive one.

Demonstration was also the second component of the scaffolded professional development. Demonstration of lessons took place in teachers' classrooms at their request or by my arrangement to support the teachers outside of the weekly meetings to show examples of the instructional structures we had talked about. My reasoning for offering to do demonstrations in the classroom was that it is often easier to understand new ideas and concepts if one can observe them in action (Lyons & Pinnell, 2001; MacNaughton & Williams, 1998). I wanted to support the teachers in this way if they felt it would benefit them. I demonstrated the read-stop-talk structure in two of the classrooms. During the second week of the intervention, I had a free period during Nora's reading time. I approached Nora and asked if she would like for me to demonstrate a small group lesson. She did and this lesson was transcribed and used during weeks three and seven of the professional development sessions. Chuck asked me to teach a small group lesson, which I did after his whole group lesson during his fifth observation.

Together, the three techniques used in this professional development helped me to explain the ideas for improving comprehension instruction in ways that, I hoped, were

clear and understandable to the teachers. In what follows, I describe each of the three teacher's responses to the scaffolded professional development.

Teachers' Responses to the Scaffolded Professional Development

My hope in creating this scaffolded professional development was that teachers would improve reading comprehension in their classrooms by encouraging students to use more explanations. However, while my goal was to encourage the use of explanation, the format for the scaffolded professional development was structured to allow teachers to rethink their reading comprehension instruction and choose how to implement what we discussed in our weekly meetings.

In general, the teachers' responses to this more open-ended format were positive. They found several benefits to this type of professional development as compared to the traditional one-shot workshop approach. As Martha noted in her final interview:

I really liked the professional development because one, you don't get a lot of chances sometimes to just talk teaching with your grade level...people...it was great to be able to just focus on just that one thing...and I thought it just helped me have that focus that every week. I'm going, okay, comprehension this week, what am I going to do with comprehension? What books am I going to choose to help with comprehension? (AT: Int/M/5-15-08/lines 63-68)

Nora had this to say at our last weekly meeting:

I think that obviously time wise it's a lot easier to go to something for two hours or for one day, but I do feel that it's more valuable doing something like this because I think you can actually implement it more in what you're doing because it was...weekly...and we were held accountable...we were going to talk about this and I felt like...I really need to focus on this...When we go to something [one day workshop] am I going to use this every week...really infuses this into what I'm doing? Probably not, I have a file cabinet full of stuff I get on those days and that's where it goes. (AT: CES 8/5-5-08/lines 223-232)

Thus it seems being able to discuss teaching practice with colleagues and focusing on reading comprehension over a period of time were elements of the intervention that the teachers found beneficial.

According to the teachers, the three techniques that were used enhanced their experience in the intervention. Presenting information was a way to share new ideas about comprehension instruction with the teachers and stimulate discussion. The transcripts were helpful because they provided a tangible record of what occurred in the small group and often served as a focal point for our discussions. As Nora noted:

I think...looking through the transcripts...especially the one that was from my class... Being there, sitting there and observing it...it was interesting because you don't pick up on everything until you actually see it there in print and I'm like, "Oh, that's what he said." And you could see their thinking more clearly, you could see your prompting and...[it] helped me a lot, seeing it on paper. (AT: CES 8/5-8-08/lines 206-212)

The transcripts allowed us to focus and reflect on what students were saying and thinking as they constructed meaning from text. The demonstrations were also effective as they afforded the teachers a different perspective as they observed the small group instruction or as they took on the role of the child during the read aloud simulations. Chuck's response seemed to indicate the simulation effectiveness.

- 1 Chuck – I was more engaged during the think aloud because when you said, I forgot what you said specifically, but I started thinking, "Oh," I actually slipped into mode, like,
- 2 Martha – like a kid
- 3 Chuck – "Let me think like I'm a teacher and like what would I do" and then I'm thinking, what am I doing? (laughter) And that's exactly what I did, what you wanted me to do, I just kind of slipped into it and started thinking, "What's the teacher thinking? How great is this?" That's what I started thinking like. (AT: CES 5/4-16-08)

The scaffolded professional development also seemed to have some impact in the teachers' classrooms because as I observed each week I saw evidence of them trying out

some of the things we talked about. I now take the reader into each of the three treatment teachers' classrooms, beginning with Chuck, to show what they actually did in their classrooms over the course of the eight weeks and if and how they used any of the comprehension ideas we discussed in their instructional practice.

Chuck. After a year or two of substitute teaching, Chuck started his full-time teaching career at Riverview Elementary School. Arriving at this school as a novice teacher, Chuck was faced with a challenge in planning his reading instruction. In some districts, the teachers' guides for the basal reading series often drive instruction and are used by beginning teachers to plan each day's lesson. However at Riverview, teachers are expected to design their own lessons, drawing on the curriculum guide as a framework for instruction rather than a specific, explicit teacher's guide. Faced with these differing expectations, Chuck reported that he had tended to shy away from professional development while he established his own foundation for literacy instruction.

My first couple of years of teaching I purposely shut down because it was difficult enough getting on your feet...I didn't need to be doing this, this, and this. So this is one of the first years that I've really...let it come in and...I've been open-minded. That's one of the reasons I didn't mind participating in the study, usually I would try to avoid it. (AT: C/Int/5-14-08/lines 200-204)

After having established his foundation over the course of six years in this school, Chuck seemed to be looking for strategies to add to his bag of tricks and agreed to participate in the study.

Chuck's participation in the professional development sessions was not as active as that of Martha and Nora. In the first few sessions, Chuck barely spoke, but he began to engage more with the group during the third, fourth, and fifth sessions. When he did

share, Chuck often spoke about what he felt might cause comprehension problems as in this discussion during the third weekly meeting.

- Linda – Until I really started working with small groups in this way, read the book and talk about those two pages...I was not really aware of the confusions about things that I thought were perfectly clear in the book. And they really don't always get what I thought they would get.
- Martha – Most of the time it's vocabulary...that throws a lot of them.
- Chuck – I think it's their life experience. (all agree) I think kids don't have these experiences and I assume that they've been to the vet with their dog. I read *Rascal* today and they're like why is it called an animal hospital? (AT: CES 3/4-2-08/lines 136-146)

Several times he shared ideas that he thought he might try to improve his instruction such as grouping the students for turn and talk.

I'm thinking...right now, my classroom is not set up for this...they [students] come to the floor and...turn and talk...but it's...like a mad scramble...So...I wrote down..., "How am I going to shape my class to encourage more talk?" And I think something like a reading buddy...It's your partner, who you sit with the whole day ...a learning buddy. (AT: CES 5/4-16-08/lines 376-383)

Comments like these seemed to indicate that the intervention was helping Chuck reflect on his practice. Over the course of the eight weekly meetings and in our conversations, Chuck did show some changes in his teaching, or at least, in his views about what comprehension is. In order to understand how the professional development affected Chuck, it is helpful to understand his foundation or belief system about reading comprehension instruction.

Chuck's foundation. In my conversations with Chuck, his views of comprehension were developmental and naturalistic, that is Chuck sees comprehension as something children grow into. From his point of view, comprehension is not necessarily something that can be taught immediately because most children do not have the

decoding skills to make meaning from text. As he explained before the intervention began:

When it comes to comprehension in the classroom, in first grade it's tougher because ...it's the last thing on their minds. They're more just word readers... The goal is to get the work done. It's not to...really understand it. At this point when they're six, especially when they're younger, they don't care about that, they just want to get through the assignment and be done with it. They're not thinking about ...what am I getting out of this reading. So I find it harder to teach comprehension in here ...because you have to get a strong base of just reading and decoding and strategies before you can move on to the comprehension. (AT: C/Int/2-27-08/lines 38-46).

Consequently, in small group instruction, Chuck said he began with teaching children decoding skills (sounding out by parts and letters) and reading strategies (such as rereading or monitoring for errors) before he focused on comprehension.

When Chuck did focus on comprehension in small groups, he said he tended to emphasize thinking about stories and making connections.

I teach a lot of it [comprehension] in reading groups because once we get past the decoding parts, they're able to focus on it and to get...inferring, and...start to think about the stories and put it in the context for...connecting to...life events or connecting to things that I've previously taught or connecting to other books we've shared. So, by connecting to those other things...I think...the comprehension starts dawning on them. (AT: C/Int/2-27-08/lines 58-63)

It seemed as if Chuck has integrated the idea of making connections from the research on comprehension strategy instruction (Keene & Zimmerman, 1997) into his understanding of reading comprehension instruction. He seemed to expect that teaching students to make connections would naturally facilitate reading comprehension.

Chuck also believes that as he stops during the read aloud to talk with the students about the story reading comprehension naturally develops.

There are times where comprehension is the main focus, but it comes more from...absorption, like in natural situations... if we're doing a read aloud, if you stop and ask questions and you prompt them to start thinking and they take the

extra steps and start thinking beyond...outside of the general terms of the story...I think that's the most successful way to teach comprehension when it comes to read alouds. (AT: C/Int/2-27-08/line 53-58)

From Chuck's perspective then, encouraging children to think as they are surrounded by conversations and being asked questions in the setting of a classroom read aloud will help children to learn how to comprehend text on their own after they have learned to decode.

While Chuck believes learning to comprehend takes work, he also believes, it seemed, that the work is learning to decode. He expects comprehension to occur naturally once students learn to decode, make connections, and are encouraged to think as they listen to stories. This "simple view of reading", that is, reading comprehension is a product of learning to decode combined with listening comprehension belies the complexity of reading comprehension (Hoffman, 2009). As Paris and Hamilton (2009) note, "Comprehension demands integration of meaning across words, sentences and passages, and relies on components skills at each of these levels for the construction of meaning" (p. 38). Comprehension relies upon extracting meaning from print and using this information with language and background knowledge to create a coherent understanding of the text that goes beyond just literal information.

Chuck's teaching. Chuck's simple views of reading were apparent when he worked to develop his students' listening comprehension in whole group discussions through questions and prompts. His developmental beliefs were evident when he interacted with small groups of students who had different levels of proficiency.

Developing listening comprehension. Teachers develop listening comprehension by discussing the text that they have read aloud as the students listen in a large group. Listening comprehension does need to be increased, however, relying on developing

listening comprehension as the primary mode for reading comprehension instruction assumes a simple view of comprehension, which as previously mentioned, does not recognize the complexities students face in learning to construct meaning from text.

Much of Chuck's comprehension instruction took place in large group read alouds where he would read a text and then use several techniques to elicit student responses. The techniques used by Chuck to develop listening comprehension were explaining his thinking out loud, sharing personal connections, and highlighting points that he seemed to think were important or confusing to the students. His talk followed the traditional classroom discourse pattern of asking individual students questions with Chuck doing most of the talking as in this excerpt from the fifth observation when he was introducing the poetry unit.

- 1 Chuck – I'll tell you a secret, can I tell you a secret? I didn't like poetry....You know what, as a matter of fact, I gave it a big thumbs down....I didn't like poetry. I didn't understand poetry. I didn't think it was cool to like poetry....I'm a cool teacher. (laughter) I want to teach fun stuff like scary stuff....But...after a while, I started thinking...maybe I wasn't being fair. Maybe I didn't give poetry a chance. Maybe... I ... had these big glasses on and I wasn't letting myself see these poems – how great they really are. And then I said, you know what, let me take these glasses off. So I took the glasses off and I...started looking at books again, especially poetry books...I picked up a simple book like, *Do Not Feed the Table* and I said, "*Do Not Feed the Table?* What's going on in that book?" What's the first question that you think popped into my mind when it came to a title like, *Do Not Feed the Table?* Jay, what do you think?
- 2 Jay – How could a person feed the table?
- 3 Chuck – Exactly!...How's that possible? So I open up the book and I started looking and I said, "Oh!" I looked at some of the titles like, The Mixer or The Waffle Maker or I picked up one like Place Setting and Can Opener, The Rolling Pin, the Oven. I said, "You know what? This is not just a story about *Do Not Feed the Table.*" It's a book of poems about what? What...does it sound like it's about? Just by reading off those titles, if you're a good thinker you can figure this out. Cara?
- 4 Cara – Kitchen

5 Chuck – Yeah, it’s about kitchens, it’s a kitchen poem. (AT: C/Obs 5/4-14-08)

As in traditional classroom discourse, Chuck gave information and then called on an individual student to respond (turn 1). The child answered (turn 2). Then Chuck evaluated his answer and repeated the cycle (turns 3-5). As he narrated his own thinking process for students, interspersed with questions, Chuck seemed to be trying to build students’ listening comprehension by asking them questions about the text or what he had said, sometimes directing them to the answers he expected (turns 1, 3). He also seemed to try to heighten students’ interest in poetry by infusing his own experiences and making a personal connection showing how he learned to like poetry (turn 1). However, this type of discourse limits student engagement as the teacher controls the conversation and talks more than the students. For example in this 30 minute session, when Chuck spoke, he used an average of 45 words per turn with students only averaging four words per turn.

Chuck used a similar instructional pattern when he continued with the poetry unit in the next observation. As he read a short non-fiction book about Ellen Ochoa (Weber, 2002), Chuck stopped to ask students questions about what he thought was important in the text. After he had finished reading the story, he had the students list the facts they remembered to assess their listening comprehension.

- 1 Chuck – Now we learned a lot of facts. Let’s do some quick facts....Rohan, what did you remember?
- 2 Rohan – She worked the space arm.
- 3 Chuck – She worked the space arm. Very good. Who else’s has got some facts?...
- 4 Ruchir –The rocket ship’s name was Discovery.
- 5 Chuck – The rocket ship she was on was Discovery. That was a good one, Lana.
- 6 Lana – She liked math and science.
- 7 Chuck – She did like math and science. That’s how she got interested in it. Emma.
- 8 Emma – She was the first one to go up into space.

- 9 Chuck – Was she the first person?
 10 All – No
 11 Chuck – She was the first what?
 12 Sam – Woman
 13 Chuck – Not just woman, they said it. Cara?
 14 Cara – Girl
 15 Chuck – Not just girl, no. Jay, do you remember what she said?...I talked about language. Remember what language I talked about?
 16 Jay – Spanish.
 17 Chuck – She was the first Spanish speaking woman, Hispanic-American, to go into space. That’s a great fact. What else? Lisa?
 18 Lisa – She likes to play the flute.
 19 Chuck – She likes to play the flute. These are all great facts. Okay, do we have to know this woman, Ellen Ochoa, to write a book or write a poem about her? (AT: C/Obs 6/4-24-08)

As can be seen in turn 1, Chuck alerted his students that he was going to ask them to recall the facts that they had heard and possibly discussed during the read aloud. Several students responded with literal facts (turns 2, 4, 6). When in turn 8, Emma stated a fact that was not correct, Chuck used questions (turns 9, 11, 13, 15) to guide the students to the answer, which he ended up stating (turn 17). While these prompts produced part of the answer Chuck was looking for, he could have reread the portion of text that he wanted the students to draw information from to demonstrate how information comes from the text not just remembering.

When developing students’ listening comprehension, Chuck tends to ask individual students questions about a text that he has read aloud. These questions tended to be literal or teacher-directed, which the students answer by remembering what was read or discussed. Thus, for the students the connection between how these ideas relate to or come from the text may not be clear because it is teacher guidance not the text that provides additional support. While background knowledge is important to reading

comprehension, the lack of balance between the text and other elements may give the students the idea that meaning is constructed by remembering rather than text.

Developmental differences in small group instruction. Over the course of the eight visits to Chuck's classroom his developmental philosophy of establishing decoding first and then emphasizing comprehension was evident. In fact, he differentiated his comprehension instruction in this way when working with groups that had different levels of reading proficiency.

Before the interventions began I observed Chuck teaching a small group of high level readers. In keeping with his developmental stance, Chuck did not focus on decoding because these were proficient readers, instead, he went straight to encouraging students to think. Working with them on comprehension, Chuck emphasized thinking skills in three ways, which were often integrated into his instruction. He prompted students to think, asked open-ended questions, and encouraged them to make connections as shown in the following examples.

Prompting students to think was the initial focus when Chuck gathered this group of five proficient readers to preview *Nate the Great* (Sharmat, 1972) on the carpet area in the front of his classroom. He began by asking the students to initially take a few minutes to get some ideas by encouraging them to think.

1 Chuck – Spend your time studying. Hold your thoughts in your brain. Okay. What do you notice? This is what readers do. They start thinking right from the beginning....they don't talk. They start thinking. Now, if you're talking to yourself, that's okay. But don't talk, think. Think, think, think. This is what people, readers of chapter books have to do. (AT: C/Obs 1/3-10-08)

The students were exhorted several times throughout the preview to think, which Chuck had said was a technique he used in read alouds, "if you stop and ask questions and you

prompt them to start thinking and they take the extra steps and start thinking beyond...the story” (AT: C/Int/2-27-08/line 55-57). But most of the time it was not specific what that thinking was or should be. Chuck seemed to be expecting the students would “take the extra steps” which would naturally lead to deeper comprehension development by just being prompted to think.

Similarly he also pointed out the reading and thinking behaviors he expected to see from good readers who were proficient decoders:

- 2 Chuck – Why don’t you take a look? Look inside the book. Good readers kind of check the whole book out. They look at the cover. They look at the back cover. They kind of take a look at the pictures. They kind of take a look at the words. Anything that you could notice.
(AT: C/Obs1/3-10-08)

Or he would expand upon student responses to model the good thinking he wanted these high-level readers to do as they previewed as can be seen here when he talked with Matt.

- 3 Matt – I was noticing things in the picture.
4 Chuck – In the picture. So sometimes it helps him think aloud, like the thinking is in your brain, but sometimes when you’re becoming a good thinker, you need to speak and you need to talk it out. And that’s what he was doing and that was good. He was looking at the pictures. What did you notice about the pictures, Matt? (AT: C/Obs 1/3-10-08)

Questioning was another way Chuck encouraged thinking. As he continued his conversation with the group during the preview *Nate the Great* (Sharmat, 1972), he often asked questions of the proficient readers what they were noticing or why they were doing something.

- 5 Chuck – Why was he going like this on the back?...Why do you think that information is on the back cover?...What was this about? I heard you reading, it sounded like you were doing something. What were you doing?...Did you hear them reading out loud? What were they saying? What were you saying?...What about the book?...What do you think they’re saying in this part?...What are you learning?
(AT: C/Obs 1/3-10-08)

Many of these questions were open-ended often one after another, possibly indicating that Chuck thought the students were capable of coming up with answers on their own and did not need his support other than prompting them with questions.

The third strategy Chuck used was making connections. For Chuck, making connections was important and tied into his belief that comprehension develops from connecting children's lives to the story and being encouraged to think.

- 6 Chuck – What do you think they're saying in this part? They're getting a scoop of it. What are you learning? Rohan?
- 7 Rohan – That...Annie lost the picture.
- 8 Chuck – Annie lost the picture. So there's a person named Annie. She loses a picture. What are they going to do about it? I'd probably sit there and cry. I don't know about you. I'd just sit there and cry over everything. So what do you do, Rohit?
- 9 Rohit – I'd ask Nate the Great because he's a detective.
- 10 Chuck – Ah! So you know a little bit. You can look at this cover. You know what Nate the Great's about. He's a detective. So what do you think Annie's going to do?
- 11 Rohan – She's going to call Nate. (AT: C/Obs 1/3-10-08)

Chuck also modeled making personal connections about what he might do if he lost something (turn 8) and asked the student, Rohan, what he would do (turn 8). Therefore, together these three strategies were used by Chuck before the intervention. He focused on prompting students to think, asked open-ended questions, and encouraged them to make connections as they previewed the book they would read independently at their seat.

In contrast to Chuck's work with the proficient readers, the two small group lessons I observed him teach with struggling readers had some of the same elements as the higher groups, but focused more on accuracy and decoding. As with the higher group, he asked questions, helped the less proficient students make connections, and

encouraged them to think, but the differences in these elements were noticeable. Chuck began by taking both groups of students through a preview and a picture walk. In the preview with the proficient readers, Chuck had them looking through the whole book to see what they noticed. In both of the groups I observed with the at-risk readers, Chuck had them focus first on the cover and then led them through the book preview page by page rather than having them preview independently as the higher level readers had done. He also tended to use fewer open-ended questions and more direct questions as in the following example where he is previewing *Mrs. Mog's Cats* (Powell, 2000) with Jay.

- 1 Chuck – What do you notice about this house? Is it a nice house?
- 2 Jay – Yeah.
- 3 Chuck – It is a nice house. How does it look after the cats get done living in it, though?
- 4 Jay – Messy
- 5 Chuck – Yeah, look at this, there's a ball of yarn over there. What else do you see that's kind of messy?
- 6 Jay – He's going to take the fish
- 7 Chuck – Yeah, he's taking the fish. The poor fish is going to live in danger. What's going on here?
- 8 Jay – I think there's a box
- 9 Chuck – Right, what would you say now if you could say, "How is life in Mrs. Mog's house?" It is what? Give me one word. Tell me that, if you know that word. You say, "Mrs. Mog's house is very ..."
- 10 Jay – Very messy
- 11 Chuck – Messy. Very good. (AT: C/Obs 2/3-17-08)

In contrast with the open-ended questions that Chuck used with the high group such as, "What did you notice?" (AT: C/Obs 1/3-10-08/line 45), Chuck used more guided questions (turns 1, 3, 5, 7, 9), such as, "What do you notice about this house? Is it a nice house?" (turn 1) or "How is life in Mrs. Mog's house? It is what? Give me one word. Tell me that, if you know that word. You say, "Mrs. Mog's house is very ..." (turn 9) to direct Jay to think about the things that Chuck thought were important.

Another way in which Chuck differentiated his instruction between high and low level readers was that more proficient readers were assumed to be capable readers and assigned to read independently at their seats and then discuss the book with him at a later time. But Chuck had the low-average students read each text with him. As they read together, Chuck coached for accuracy and decoding as well as guiding the students' discussion of the text, as in this example when he read *Mrs. Mog's Cats* (Powell, 2000) with Jay.

- 1 Jay – (reading) *You see cats at the window and cats at the door. Cats on the*
- 2 Chuck – It's like an S sound [in ceiling]. That's a rule breaker, too.
- 3 Jay – (reading) *ceiling and cats on the floor*
- 4 Chuck – Good
- 5 Jay – (reading) *You see cats in the bathroom and cats in the bed. Cats in the kitchen and cats being fend.*
- 6 Chuck – What makes sense? Because the word here, do you hear the rhymes in this book? Have you heard them so far? There's rhymes in this book. Did you know that? Look at this. (reading) *You see cats at the window and cats at the door. Cats on the ceiling and cats on the floor.* So listen to this. You said, (reading) "*You see cats in the bathroom and cats in the bed. Cats in the kitchen and cats being fend.*" Does that make sense?
- 7 Jay – No
- 8 Chuck – What makes sense? It has to rhyme with this. So read this again.
- 9 Jay – *bed.*
- 10 Chuck – So read it again. Go
- 11 Jay - (reading) *Cats in the kitchen and cats being fed*
- 12 Chuck – This is what you have to think of as a reader. Good.
- 13 Jay – (reading) *There are cats by the, There are cats by the beehive catching/chasing the bees.*
- 14 Chuck – Yeah, it looks like catching, but it's a CH, what are they doing?
- 15 Jay – Chasing
- 16 Chuck – Thank you...
- 17 Chuck – Yeah, so you can say that cats mess up the house. What else do they do?...
- 18 Jay – (pause) They were chasing the mouse.
- 19 Chuck – Yeah, they're chasing mice. How else are they getting crazy? What are they doing? That's the key word, they're getting crazy.
- 20 Jay – Um, they're on the rooftop and they're chasing bees.
- 21 Chuck – They're chasing bees. They're on the rooftop. Look at, they're doing all those things. Anything else? Are they in any rooms? What are

- they in?
- 22 Jay – Kitchen, bathroom, bedroom...
- 23 Chuck – I've seen them try to catch birds, but these cats are going crazy. They're on the roof. How did a cat get on the roof and why would he want to go up there? Why would they want to be in trees like this?
- 24 Jay – Yeah, but he's thinking there's bees (inaudible)
- 25 Chuck – ...And you did a pretty good job, Jay, and you know what you've got to do though? You have to learn to be a thinker. You've gotten so good at your reading, you've got to start thinking about that story. And don't be afraid to take chances. You're doing a good job, though. Okay. (AT: C/Obs 2/3-17-08)

When Jay made an error (turn 5), Chuck monitored by asking if the error made sense (turn 6) and gave Jay hints about letter sounds to aid in problem solving (turns 2, 14). Chuck confirmed that the problem solving he had coached Jay through (turns 6-11) was the kind of thinking Jay needed to do to read (turn 12). They did not talk much about the meaning of the story until after Jay had finished reading and most of the content of the talk focused on decoding or the literal information about what the cats did. Most of Chuck's questions were direct and asked for literal events from the story (turns 17, 19, 21). However, in turn 23, he did ask Jay why something happened one time.

In summary, with both proficient and less proficient groups Chuck facilitated making connections and did a lot of explaining to model and to encourage thinking when previewing a new book with a group. However, the previews with the low-average readers had more direct questions, which reflects his belief that students who need help with decoding are not ready to comprehend and need more support. He emphasized decoding skills and reading strategies as he listened to low readers read and he questioned to draw out literal information. With more proficient readers, Chuck tended to use more open-ended questions with more emphasis on thinking during the preview of the text. He expected more proficient readers to comprehend on their own as they read independently

implying that since high readers do not have decoding issues they would not need help with comprehension as they read.

Dabbling with change: Chuck's response to professional development. As can be seen from above, Chuck had an established set of beliefs and practices about reading and comprehension. In the first two weekly meetings of the professional development, Chuck spoke very little. I had noted in my fieldwork journal that he seemed “off” at the first session. However there was a noticeable change in Chuck's participation and stance in the professional development during the third week. In this session we talked about engagement through talk when using the interactive read aloud, reading workshop, and small group instruction. We also looked at a transcript of the small group lesson I had taught in Nora's room. In Chuck's reflection for this week, he shared:

I don't know if it was the lesson or the week, but this is the first week that I feel that I'm finally setting in the flow of your meetings and observations...I enjoyed the conversation this week and felt connected to the idea of studying reading comprehension for the first time since we've started.
(Doc: C/refl/email/4-4-09)

As Chuck noted, he really felt connected to the intervention in the third weekly meeting, perhaps because, as noted below, he had been trying out the read-stop-talk structure and prompts in his small group lessons before the weekly discussion session.

Making changes in small group instruction. Prior to the third weekly meeting, Chuck's small group lesson really hit the mark and exemplified what I had been encouraging the teachers to try. In this high-average group of three students, Chuck used the read-stop-talk structure to support construction of meaning during the reading as they read and discussed “The Wishing Well” chapter of *Mouse Tales* (Lobel, 1972).

1 Anish– (reading)“*What shall I do?*” *cried the mouse. My wishes will never come true this way. The mouse ran home. She took the pillow from*

- her bed. "This may help," said the mouse. And she ran back to the well.*
- 2 Chuck - Now stop right there. Does anybody have any why questions? Oh, look at this. Ayush? What are you thinking?
- 3 Ayush - Why is the mouse going to get... a pillow and put it in the well, right?
- 4 Chuck - Yes, that's what it looks like.
- 5 Ayush - Why and how is it going to help?
- 6 Rohan - I know.
- 7 Chuck - You stole my question. (laughter) Good readers probably come up with the same ideas and questions. You just stole mine. Give it to Rohan, go ahead...
- 8 Rohan - Maybe he's going to throw a pillow in the well and then he's going to throw a coin and it won't say ouch!
- 9 Chuck - Why? What do you think's going to happen? What's the pillow going to do? Anish, what's the pillow going to do?
- 10 Anish - Maybe it's going to keep it from hurting the well.
(AT: C/Obs 3/3-31-08)

Chuck had the students read a few pages and used some of the prompts suggested in the intervention by asking students what they were thinking and why (turns 2, 9). He modeled by asking his own "why" question (turn 7) and gave the students the opportunity to explain what they thought (turns 2, 9), which can help students deepen their own understanding (Siegler, 2002; Van den Branden, 2000). Chuck prompted students in this small group for their thinking twice as much as he did in his other small groups before or after this observation.

Asking students to explain why had been emphasized in our weekly meetings as a way to have students go beyond the surface meaning of the text (Graesser et al., 1994; Pressley, 2002). Previously in small group lessons, Chuck had asked why questions an average of four times. In this small group, he asked 23 why questions. The students gave 19 explanations (prediction, explanation, or inference) in comparison to the other small groups where students gave 3 and 4 explanations. Since these three students were high-average readers and did not need decoding work, it is not evident whether this was a

change in Chuck's belief that decoding comes before comprehension instruction. But reading and stopping to talk while the students were reading was a change from Chuck's first observation of high readers where they read independently at their seats.

However, even after the prompting of students for their thinking had been emphasized in the weekly professional development meeting, Chuck's prompting for less proficient readers, as he had them read-stop-talk, remained more directive of students' thinking with fewer why questions asked and less explanations given. For example, Jay and Annie, two at-risk readers, were previewing a how-to book, *Clay Creatures* (Vogelnest, 2000) with Chuck before they read it.

- 1 Chuck – Take a look at the cover and tell me what you're thinking. Is there anything that kind of jumps out at you, something that's interesting maybe? What are you thinking? You're not thinking anything, Annie? You're not thinking anything? Well, take a look, just the cover. I'll give you a hint. My thing when I'm a reader and I'm practicing books for the first time, I like to study the picture. And I told you that before, I study the picture. What's this...a picture of, Annie?
- 2 Annie – Um, animals...and trees and leaves and rocks
- 3 Chuck – Yeah, it's interesting, so you would say, if there's a setting to the story, where is this story taking place, do you think?
- 4 Annie – um,...I don't know.
- 5 Chuck – Well, think about it, you just told me. You said some of the clues were animals and plants and trees and things. So where would you say this was happening?...
- 6 Annie – In, uh,...I can't tell.
- 7 Chuck – You can't tell? Help her out, Jay. If...you got that book for the first time, where are you going to say most of the events take place? Where is the story happening?
- 8 Jay – By a pond
- 9 Chuck – ...Yeah, by a pond, maybe outside. What are you thinking, Jay, where is this story happening?
- 10 Jay – By a river (AT: C/Obs 4/4-08)

As can be seen in this conversation, Chuck started out with open-ended questions (turn 1) asking Jay and Annie what they thought. But Chuck quickly moved to guiding their

thinking (turns 1, 3, 5, 7, 9) as when he used the question, “What is this... a picture of?” (AT: C/Obs 4/4-08/lines 67-68). Such questions direct student thinking. It is almost as if Annie and Jay had to guess what Chuck was thinking as his questions seemed designed to lead them to the answers he had in mind. While Chuck had previously taught an exemplary small group lesson, in this lesson with at-risk readers, he seemed to try the open-ended prompts, but quickly went back to more directed questions.

Rethinking talk. The emphasis on talk in the conversations during the weekly meetings also seemed to resonate with Chuck and he began to see talk in, perhaps, a different way. In the third weekly meeting, he began to reflect on his practice in relation to talk.

I think I talk too much all the time...I'm constantly leading them too much, but it's either that or you get nothing...What do you want, do you want nothing or do you want something even though it's piggybacking off of what I'm saying? (AT: CES 3/4-2-08/lines 363-365)

By week four, he spoke about trying to put what we had been discussing about engaging students through talk into action.

I'm trying to get them to talk more, and to each other, less to me and more to each other...It does help when they talk. I think it's easier at least to see what they're thinking because before I used to think they weren't thinking. Now I realize they are thinking, but it's not exactly what I want, so let's try to get it. (AT: CES 4/4-9-08/lines49-63)

In the exemplary small group lesson Chuck did have the students asking questions and responding to each other, which was a change from previous observations.

I also observed Chuck using turn and talk twice, one time in each in two of his whole group lessons, but I did not note a big change in his practice. In his read aloud of *The Art Lesson* (DePaola, 1997), Chuck asked the students to turn and talk. On the previous page of the book, the art teacher had told the students to copy her as she drew.

Chuck – (reading aloud) *“Now what’s the matter?” Miss Landers asked. Tommy looked past her and spoke right to Mrs. Bowers. “I’m going to be an artist when I grow up and my cousins told me that real artists don’t copy and besides, Miss Landers won’t let me use my own 64 Crayola crayons.* (to students) What are you thinking now? Turn and talk to a neighbor and tell them, what do you think is going on and what’s going to happen?...Alright, if you haven’t switched, make sure your partner gets a chance. (AT: C/Obs 8/5-5-08)

Chuck gave an open-ended prompt for the students to discuss their thinking and tried to make sure that each partner had a turn to talk.

Encouraging explanation during read aloud. Further evidence of Chuck implementing what we had talked about to elicit student thinking and encourage explanations was in one of his whole group lessons. I observed Chuck teaching four whole group lessons, but it was the read aloud in his last observation when Chuck read *The Art Lesson* (DePaola, 1997) that exemplified the ways of constructing meaning that the intervention proposed.

- 1 Chuck – (reading aloud) *On Monday Tommy brought his 64 crayons to school. Miss Landers was not pleased. “Everyone must use the same crayons,” she said. “School crayons!” School crayons had only the same old eight colors. As Miss Landers passed them out to the class, she said, “These crayons are school property. So do not break them, peel off the paper or wear down the points.”* (to students) Lana, what are you thinking?...
- 2 Lana – I think she’s getting angry with him because she wants him to follow school rules.
- 3 Chuck – Really, why do you think...she’s going to get angry? What do you think about Tommy though, Lana?
- 4 Lana – He must be sad because he wants to use the new crayons he got for his birthday...
- 5 Chuck – Yeah, he might be sad...How is he going to react to this news?... Arvind, what do you think? He can be sad.
- 6 Arvind – Mad
- 7 Chuck – Maybe mad, why do you think mad?
- 8 Arvind – Because her mom or dad gave him crayons to color at home and at school and she won’t let him.
- 9 Chuck – See if your predictions are correct. (AT: C/Obs 8/5-5-08)

As can be seen in this excerpt, Chuck applied the read-stop-talk structure to his read aloud. He often stopped after each page or two and asked individual students what they were thinking without directing their thinking by having information in the preceding or following sentences (turn 1). The students' answers tended to be full sentences and reflective of the text (turn 2). He also asked follow up questions (turn 3) and encouraged students to give explanations if they had not already explained their thinking (turn 7). Chuck asked the students what they were thinking 33 times in this lesson. The average in his other whole group lessons was seven. In keeping with the aims of the professional development intervention, the students gave more explanations which the intervention proposed can help them construct deeper meaning from text. The students gave 32 explanations as compared to an average of 6 in the other three whole group lessons. However, despite the two exemplary lessons, I did not observe a change in Chuck's developmental approach to comprehension with small groups. When working with at-risk readers, Chuck continued to focus more on accuracy and decoding during the reading and used guided, direct questions that elicited more literal information than explanations.

Summary. Looking across the course of the professional development, there was evidence that Chuck dabbled with change by trying some of the concepts we discussed in the weekly meetings. In most of the observations, he seemed try to integrate the read-stop-talk structure and some of the prompts into his current practice. However, as described above, he only had two exemplary lessons during the observations – one small group lesson and one whole group read aloud. Chuck's exemplary small group lesson with his high-average group was during his third observation and had Chuck using the read-stop-think structure and prompting for student thinking and explanations. He still

emphasized listening comprehension in his read aloud, although he was also doing more comprehension instruction in his small groups. However, his pattern of expecting more independence and thinking from higher readers and seeing less proficient readers as needing a lot of guidance with comprehension as well as reading accuracy, therefore, did not seem to change. His exemplary whole group lesson was during his last observation and therefore it is not known if these changes were sustained in his practice.

During the intervention, Chuck was observed using the read-stop-talk structure in three small group lessons and one whole group lesson. A year later Chuck admitted he has used the structure some, but not consistently.

The read-stop-talk method is still good, but I find myself doing it less and less due to either time constraints or the objective of the lesson. Some books are better than others for this idea, too. It all depends on the level and number of kids. In a nutshell, I started out with good intentions and did it, but I let it slip as the months went on. (Doc: C/follow-up/email/5-6-09)

A year later, Chuck also spoke to changes in his practice when it comes to the concept of talk. He reported that he often asks students, “What are you thinking?” and found it a good way to start discussions. As far as classroom talk, although he still holds onto the belief that the developmental level plays a strong role in the quality of talk in his classroom, he is more aware of using talk.

The study changed my thinking when it came to talk and comprehension in the classroom. I tried to do it more frequently in the beginning and integrate it in all subjects. It got better after a lot of practice. I think the developmental level of the class is a huge hurdle to overcome when it comes to quality, however. Our conversations take place, but I can say I don't know if there's a lot of quality to them. I think it has helped them in their approach to organizing their thoughts and getting information out quicker. (Doc: C/follow-up/email/5-6-09)

Perhaps the biggest change for Chuck has been to see comprehension as important for first graders as decoding and to see that it needs to be taught from the beginning of the year.

Well, now, (laughs) now I want to start teaching it early. I always taught it second. You did decoding, you did strategies, you got them strong in those areas and then you taught comprehension. I mean you might have taught it, but it wasn't a focus. Now I think they should be equal...I want to make it a priority to use the word comprehension...if I start introducing it from the beginning like, "Comprehending, how do you understand those words?"...I think it's going to help...my teaching down the road...The turn and talk and getting the kids more active and more verbal. I think that's very important.
(AT: C/Int/5-14-08/lines 22-34)

Thus, while Chuck seemed to be the least invested of the three treatment teachers, he did try out some of the new ideas, but it did not appear that he embraced them in his practice. He articulated some shifts in his beliefs but, without further observation it is difficult to tell if there were any changes in his foundational understandings of reading comprehension.

Martha. A primary grade teacher in the River Glen School District for 23 years, Martha moved to Riverview Elementary School when it opened six years ago. As one of the senior teachers on the first grade level, Martha has been through many district initiatives during her time at Riverview Elementary School and she is always willing to learn about new ideas. At the time of this study, for example, Martha was doing a self-study of metacognition that began with her participation in a school book study on *Starting with Comprehension* (2005) by Andie Cunningham and Ruth Shagoury. Perhaps as a result of her position in the school, Martha seemed confident in her own knowledge and was willing to participate in the study in order to help me with my work. As she

said, “I’m just going to go along with whatever you need...me to do...Hopefully I can do what you’re asking ” (AT: M/Int/2-28-08/lines 121-122).

Martha’s confidence and experience may have been the reason she had more to say during the weekly meetings than the other two participants. I could always count on Martha to give her insights on what we were talking about in the discussion sessions. She was often the first person to comment and was always willing to share ideas from her own practice. For example, the second weekly meeting began with teachers’ sharing ideas and concerns, and Martha started the conversation by saying:

I’m introducing a new book and doing I understand, I don’t understand and what I wanted to do with them today was when they have a “I don’t understand,” how do we fix that? How do we help ourselves fix what we don’t understand in comprehension?...I was trying to think about some of the easiest ways I could... give them and basically the strategies that I was thinking about were rereading and reading on...because...first they’ll say they don’t understand, but they haven’t read on enough to solve that confusion...or reread...Sometimes, the “I don’t understand” are words and that’s vocabulary building...but, if they don’t understand the vocabulary then they can’t create the meaning either, so there’s a lot in this. (AT: CES 2/3-18-08/lines 42-52)

When the discussion turned to student thinking and misconceptions in the fourth weekly meeting, again, Martha added her ideas.

I absolutely agree. That language piece shows up more and more and more and even with the children that...have a little bit of thinking behind them....At least they’re questioning what those things are [vocabulary and concepts in story]...but they don’t know how to help themselves figure out what that is. (AT: CES 4/4-9-08/lines 85-88)

In the sixth weekly session, Martha shared ideas about recordkeeping when we were looking at engagement opportunities in conferences.

Once they get into long[er] books, my assessment becomes different because I’m not doing so much of their decoding and fixing their word calling...as I am assessing that their understanding the story...usually by December I break off and quit using my little notepads because, kind of moving them into, by then they should be moving into thinking about story. Hopefully sooner next year than

later, than December again because I will have been working on that in the large group the entire, up to that time. (AT: CES 6/4-24-08/lines 238-243)

Comments like these enriched the weekly conversations. Martha spoke at every weekly meeting. In fact, excluding the first session when I did most of the talking, Martha shared her ideas on an average of eight times each week. Her confidence and experience were evident in these weekly discussions and also in our conversations and my observation of her practice. In what follows, I outline Martha's beliefs about comprehension, how she approached the teaching of comprehension. I then examine how the professional development affected her comprehension instruction.

Martha's belief system. As a veteran teacher, Martha has a lot of knowledge to draw on. Her beliefs and classroom practice seem to have been shaped, in part, by Riverview Elementary School's emphasis on comprehension strategies and the district initiative to provide professional development in the Writing and Reading Workshop (Calkins, 1994, 2000) through Teachers College. The influence of her experience as a teacher and as a participant in these new professional development initiatives, can be seen in her beliefs and practices.

Her view of reading comprehension, like many teachers, focuses on the outcomes of reading a text. Her definition of comprehension is "thinking about what I'm reading and being able to... articulate what I've read, being able to discuss... what I've read, and to... find evidence within the book about what I've read" (AT: M/Int/2-28-08/lines19-21). The way she defines comprehension reflects what readers are often expected to do after they have read a book to show they understood the text. In her final interview, Martha expanded on her ideas about comprehension:

Comprehension is...understanding... and being able to make connections from either book to book or personal life...children make connections from their own life...then they have a deeper understanding and they...can start making that leap into inferential thinking that, “Oh, that’s how that character feels because I know, I’ve had that happen to me.” So...comprehension’s the only thing really about reading. Once you can figure out words, then it’s comprehension only. (AT: Int/M/5-15-08/lines 9-16)

When looking at her practice, three components of Martha’s belief system stood out across the interviews, weekly discussions, and observations of her teaching. The first component was Martha’s commitment to teaching comprehension with talk and questioning.

It starts out orally...and it’s questioning, a lot of questioning and then oral answers and then trying to probe deeper...how did you know that? What told you in the story about that? Can you explain your thinking? So they may tell me a small bit and then it’s the probing, the extra questions that you ask, not just taking the surface, literal answers. It’s the deeper probing of it. (AT: Int/M/2-28-08/lines 34-39)

Martha appeared to have a strong understanding of teaching comprehension. She spoke of asking students’ questions to help them go beyond literal, surface information (Duke & Pearson, 2002). In our third weekly meeting when we were discussing a transcript of a small group using the read-stop-talk structure, Martha shared how essential it is for teachers to prompt for deeper thinking.

Even if they [students] do stop and think, a lot of it is still surface, you know, it’s not that real deep thought yet...because you have to scaffold it for them...you have to ask the right questions to get them to start thinking that deeper thought. (AT: CES 3/4-2-08/lines 579-583)

Her current comprehension emphasis is on metacognition, or reflecting on one’s own learning process, as she said, “This year I’ve actually started with teaching the children what metacognition is, that it’s thinking about our thinking and doing, ‘I understand and I don’t understand’” (AT: Int/M/2-28-08/lines 23-25).

Making personal connections, where students relate their own experiences to the text, is one of the current strategies advocated by researchers to improve reading comprehension (Harvey & Goudvis, 2000; Keene & Zimmerman, 1997; Miller 2002). Martha may have learned about comprehension strategies through previous school book studies and often encouraged her students to make personal links to texts, which is another component of her belief system. While Martha mentioned making connections in her interview, it was in the second weekly meeting that she explained the importance she attaches to this concept. Martha links comprehension with making personal connections or background knowledge and sees this as essential for true understanding.

Of course some stories...should just be for pure enjoyment...and [you should] not have to make connections,... but I guess if you're wanting children to think about their reading and to be able to talk about it then they need to make the connections to it from their own lives...because that's the only way they understand if they've had a personal connection with it. (AT: CES 2/3-18-08/lines 296-304)

She believes that children need to have some experience with what they are reading about in order to understand it and often uses prompts to facilitate students making these types of links.

In addition to believing that questioning and connections can help students learn to comprehend, Martha believes that children must be developmentally ready in order to profit from comprehension instruction. In other words, a child's maturity or skill development must be at a certain place before comprehension instruction should be started. For example, in the second weekly meeting Chuck had been talking about how difficult it is to get all students interested in learning. Martha responded:

A lot of it...is age...because I've had other groups that have been older, more mature...and they will get themselves involved...in the book and they understand and they start to make those connections so I'm not sure this isn't also a developmental process. (AT: CES 2/3-18-08/lines 59-62)

For Martha, then, age seems to be a precursor to some of the problems teachers have in getting children to independently use what has been taught. When Nora talked in week four about how she continually modeled reading strategies but did not find that her students used them on their own, Martha agreed and felt that this was also related to a developmental process.

It doesn't transfer...maybe it's just because we've got developmentally young kids, they're just not ready to transfer it yet. It's there, but...they're just not transferring it into their own reading yet....It's like...a little kid who learns how to walk...he kind of knows all the parts and things, but it takes a while to put it all together. And they've just not got it all together yet because of their developmental age. (AT: CES 4/4-9-08/lines 99-104)

From Martha's perspective, students must be at a certain point in their development to really benefit from comprehension instruction.

While the readiness concept of teaching decoding before comprehension is not accepted by all researchers, in many ways Martha knew and could talk about some of the current practices of good reading comprehension instruction. However, when we began this study together, her teaching often reflected traditional classroom discourse patterns.

Martha's teaching. These three components of Martha's belief system – questioning, making connections, and a developmental focus – were evident in her teaching during my seven observations of her practice. How these components were used to teach reading comprehension, however, depended on the instructional event. While questions were used at all levels of instruction, her use of questioning was most evident in the read aloud lessons where Martha sought to elicit and guide student thinking about the text. Making connections was also seen across all levels of instruction, but Martha spent more time on this strategy in her small group instruction. Martha's developmental

approach surfaced more in her individual conferences which tended to be short and somewhat driven by the book level she had assigned individual students to read.

Questioning. Even before the intervention started, Martha used questioning in all of the instructional settings in her room. As can be seen in the following excerpt, her questioning techniques were used most effectively when she worked on listening comprehension in her whole group lessons. Using teacher directed questions, she asked students to think about what happened and why or used questions to facilitate students' understanding of the character or text.

When I entered her classroom for the first observation, Martha had already begun her whole class read aloud of *Lost* (Johnson & Lewis, 1996) where a girl and her father are in the desert calling for her lost dog Flag.

- 1 Martha – (reading aloud) *Suddenly there was a howl sounded just like Flag. We started yelling his name, “Flag! Flag! Flag!” We kept on calling and listening. All we heard was our own voices echoing back at us.* (to students) How is our little girl feeling now? If you understand, put your stick up so I can see who understands how she's feeling now. Good job. Max, explain to us how she's feeling.
- 2 Max – Disappointed.
- 3 Martha – Oh, you used that word disappointed again...Can you tell us why she's disappointed? Max.
- 4 Max – Because she thought Flag would come back but their voices just kept coming back.
- 5 Martha – Their voices was just echoing back and they couldn't find him. Neha, do you have some more to add?
- 6 Neha – She was upset.
- 7 Martha – That's another word, upset. Yes, she was upset because he didn't come back and we know that by looking at the picture. What do you think is happening to her?
- 8 Ava – She's crying
- 9 Martha – Akshar, what do you think is happening just by looking at this picture?
Do you understand?
- 10 Akshar – She's crying
- 11 Martha – How many of you would probably be crying, too, if it was your dog and it was lost?

- 12 Students – (some students raise their hands, a few make comments/inaudible)
13 Martha – Yeah, you understand that, don't you? (AT: M/Obs 1/3-11-08)

Although I did not hear her introduction to this lesson, Martha seemed to focus on understanding the character's feelings. As she read each page or section aloud, Martha asked the children to give a non-verbal signal and put their craft sticks up if they understood how the character felt at that point (turn 1). Then a student would be called on to explain his or her thinking (turns 1, 3) or if someone did not understand the concept, Martha would often ask another student to help out. Questions were also used to elicit explanations about what happened in the story or Martha would give an explanation. For example in turn 5, Martha clarified Max's answer, inserting vocabulary by using the word echoing, and extended Max's answer by explaining that the girl and her father could not find the dog. Then she asked a very open-ended question, "Do you have more to add?" to see if Neha had any other ideas, which encouraged student thinking. In addition to questioning, Martha also prompted her students to make a personal connection by asking, "How many of you would probably be crying, too, if it was your dog and it was lost?" (turn 11). While she engaged all students using the non-verbal signal, she only called on individual students to verbally respond to her questions, which limited the engagement of some students.

This pattern of using questioning and modeling to guide students' thinking and show students how to construct meaning from text was evident in most of Martha's read alouds. Her use of questioning was seen in four of the read alouds when the objectives in her lesson plans for those days were metacognition and getting students to express their thinking about the text. For example, in the following excerpt from the fourth observation, her read aloud was *My Great Aunt Arizona* (Houston, 1997) where the

objective for the lesson was “What are you thinking?” Martha used a number of open-ended questions to elicit students’ thoughts.

- 1 Martha – (reading aloud) *She taught in the one room school where she and Jim had sat. She made new chalkboards out of lumber from Papa’s sawmill and covered them with polish made for shoes.* (to students) Now they didn’t have chalkboards and things like that so you had to make them out of, make your own. (reading aloud) *She still wore long, full dresses and a pretty white apron. She wore high button shoes and many petticoats, too. She grew flowers in every window. She taught students about words and numbers and faraway places that they could visit someday. “Have you been there?” her students would ask. “Only in my mind,” she answered. “But someday you will go.”* (to students) What are you thinking now?...
- 2 Akhil – The girl thinks it’s going to be a good place so they go there....They grow up and then go there and it’s a really good place.
- 3 Martha – A good place, all right. Priti, what are you thinking?
- 4 Priti – Maybe she’ll go to a faraway place...
- 5 Martha – Maybe she would go to a faraway place, she hasn’t yet, but maybe she would. Kayla, what are you thinking?
- 6 Kayla – I’m thinking that she will go to a faraway place...
- 7 Martha – Okay, what gave you an idea to think that, too?
- 8 Kayla – Probably because she got grown-up.
- 9 Martha – Okay, Neha, what do you think?
- 10 Neha – Why did she do it in the same school?
- 11 Martha – Good question. It’s a good question. Shri, what do you think?
- 12 Shri – Because that is the only school that’s left. (AT: M/Obs 4/4-8-08)

As can be seen, Martha used the open-ended prompt, “What are you thinking?”, to elicit student views and reflections several times (turns 1, 3, 5, 9, 11), which engaged the students in the discussion. The students responded with their ideas (turns 2, 4, 6, 8) and Martha asked Kayla (turn 7) for the source of her idea. This more open-ended discourse showed that some students were gathering ideas from the text as when Priti (turn 4) and Kayla (turn 6) talked about the teacher eventually going to a faraway place and it also allowed for Neha to pose a question beyond the text about why the teacher came back to her school to teach, which Martha asked Shri (turn 11) to answer.

However, when Martha's lesson objective became more explicit or skill oriented, she regularly shifted to more teacher directed questions that tended to assess student thinking rather than open-ended questions, which can showcase student thinking. This change from open-ended to teacher directed questions can be seen in this excerpt from my fifth observation of Martha's classroom where she was questioning students after reading aloud *The Monkey and the Crocodile* (Galdone, 1987).

- 1 Martha – What's the monkey's problem in this part of the story? Akhil, you want to give it a try?
- 2 Akhil – crocodile (inaudible)
- 3 Martha – How do we know that? What does it show us in the book?
- 4 Akhil – because he dived down in the water.
- 5 Martha – Now that was the dive down in the water. That was the first problem. This is the second problem...Mohit, what does it show us in the book that's another problem in our story?
- 6 Mohit – The crocodile opens and closes its eyes
- 7 Martha – Now that's the solution, what's the problem?...Allison, what's the problem?...
- 8 Allison – The monkey thought the crocodile wanted to eat him.
- 9 Martha – We know the crocodile wants to eat him. Sebastian, what's the problem?...
- 10 Sebastian – He saw the monkey jump.
- 11 Martha – Ah! The problem is the crocodile knew the monkey jumped back and forth to the island using the rock and he said to himself, "Ah-ha, what am I going to do?" What did the crocodile say to himself? Andy?
- 12 Andy – He was going to lay on the rocks so he could eat him.
- 13 Martha – He was going to lay on the rocks and he was going to trick that monkey, wasn't he? So that was the problem. The crocodile was laying on the rock waiting for the monkey to come so he could eat him. (AT: M/Obs 5/4-15-08)

Martha's teaching objective for the lesson was for students to be able to identify problem and solution. Rather than exploring students' perception of the text as she had done in the previous example of her read aloud of *My Great Aunt Arizona* (Houston, 1997), Martha had a specific aim in mind and used questions to guide the students to the answers. At this point in the discussion, Martha was trying to elicit the second problem

the monkey was having with the crocodile, which was that the crocodile was pretending to be a rock, hoping that the monkey would jump on him so he could eat the monkey.

When Martha called on Akhil, he stated the crocodile dived into the water (turn 4), which was an earlier problem, since the crocodile had tried several times to trick the monkey.

But this was not the problem Martha had in mind (turn 5). In turns 11-13, she guided the class to state the problem she was looking for. Martha did most of the work in the discussion and only occasionally asked for explanations or sought out what students were thinking about the story.

In the seventh observation, three weeks later, I observed a similar interaction pattern. In this lesson, Martha's objective was how to write a retelling of a story, which she demonstrated with a worksheet on the easel as students sat on the rug in front of her. As shown below, she used teacher directed questions to guide the students to give the information she wanted to hear after she had reread the book, *Jack and the Beanstalk* (Granowsky, 1996).

- 1 Martha – All right, if you were going to retell the story of Jack and the Beanstalk, what would be...the first important thing that... I could put in this area here [model of worksheet for retell]. Alex?
- 2 Alex – Gold
- 3 Martha – Is that the first thing that happens, Alex?...Allison?
- 4 Allison – They lived in a small house in the country
- 5 Martha – What is the most important thing at the beginning of this story?
Ben?
- 6 Ben – They lived in a small house and didn't have much money
- 7 Martha – And didn't have much money. Who's they? When you're retelling you have to name the characters. Who's they?
- 8 Ben – Jack...his mother
- 9 Martha – Jack and his mother (pause) and his mother (pause) were (writing on model – Jack and his mother were poor)
- 10 Ben – Poor...
- 11 Martha – Jack and his mother were poor. Do we need anything else here at the beginning of the story? Jack and his mother were poor. Maria?
- 12 Maria – They had a garden (inaudible) and there was nothing in the garden and

- the cow didn't have milk.
- 13 Martha – Okay, now remember, I don't have much room, [on the worksheet] so what's the important part?
- 14 Maria – They sold the cow
- 15 Martha – ...Kayla, what did mother say?...Mother told
- 16 Kayla – Mother told, um
- 17 Martha – Who?
- 18 Kayla – Jack
- 19 Martha – To do what?
- 20 Kayla – To sell the cow (AT: M/Obs 7/5-6-08)

In this segment, Martha asked for the first important idea that she would write for the retelling (turn 1), when the students did not give the response Martha was looking for, she restated the question (turns 3, 5) until Ben came up with an appropriate response (turn 6). When Maria mentioned that they sold the cow (turn 14), Martha prompted (turns 15, 17, 19) for the answer she wanted – that “Mother told Jack to sell the cow.” Using a series of specific, closed questions focused on her aims, Martha led the students to give the information she sought.

While Martha was still asking questions in the fifth and seventh read alouds, her use of teacher directed questions overrode the more student centered interactions that had been seen in her previous read alouds, where she had asked “What are you thinking?” an average of five times in each of the five other sessions. Thus, her belief that questioning was important to comprehension development was evident in Martha's whole group read aloud lessons, but varied in how she applied it. When the concepts themselves were more open-ended, she had more student centered interactions and when the objectives were more explicit skills, she tended to use questions to elicit the responses she wanted from students.

Making connections. Facilitating students' personal connections to the texts read echoed across all levels of Martha's reading instruction. In the read alouds, Martha often

modeled by relating her own experiences to the text or prompted the students to make these links, as when she was reading *Everybody Cooks Rice* (Dooley, 1992).

- 1 Martha – (reading aloud) *Everyone in the Hoo's house uses chopsticks*. How many of you know how to use chopsticks?
- 2 Students – (several students raise their hands)
- 3 Martha – All right, hands down. I try. I'm not as good as some people.
- 4 Ben – Me, too.
- 5 Chris – I use them. (AT: M/Obs 3/4-4-08)

Martha also encouraged students to make connections during small group lessons.

For example, when her low-average readers were discussing the book *Bully Bear*

(Jarman, 2000), Martha helped the students connect with the feelings the characters had when *Bully Bear* took their toys.

- 1 Martha – Oh, so he [*Bully Bear*] wants more than he has. Has anything like this ever happened to any of you?...Ronald?
- 2 Ronald – My brother likes to take...away like my toys and stuff
- 3 Martha – Okay, so when he does that, what's your feeling inside?
- 4 Ronald – Sad
- 5 Martha – Just sad? You don't get angry?
- 6 Ronald – I get angry sometimes.
- 7 Martha – Yeah, sometimes you do get angry, don't you? Yes, Emily.
- 8 Emily – My brother does the same as Ronald's.
- 9 Martha – Your brother does the same as Ronald's, and how does that make you feel?
- 10 Emily – Sad
- 11 Martha – Yeah, sad and angry sometimes. Yes, Kayla.
- 12 Kayla – My baby sister always does that to me.
- 13 Martha – Oh, it's true then. Priti, what about you?
- 14 Priti – My dad gave me a gift and my sister helped open it and she wanted it.
- 15 Martha – Oh, did she give it to you. Did you give it to her?
- 16 Priti – No, she wanted it.
- 17 Martha – Oh, she wants it...So now do you think...*Bully Bear*...should be that greedy?
- 18 All – No
- 19 Emily – He should buy his own stuff. (AT: M/Obs 1/3-11-08)

As can be seen in turn one, Martha prompted for personal connections by asking if anything like this had happened to the children. She followed up by eliciting individual

students' feelings when they were in a similar situation (turns 3, 5, 9), which echoed the whole group lesson's focus on understanding how characters felt. Martha emphasizes these links because as she said in the third weekly meeting, "[It's] those connections...that lead...to...understanding" (AT: CES 3/4-2-08/lines 399-400).

Martha also used personal connections in her one-to-one conferences with students. In a conference with Ben, for example, Martha attempted to clear the confusions he was having as he read *The School Nurse from the Black Lagoon* (Thaler, 1995) by helping him use his own knowledge of his school nurse to understand the text. At the beginning of the conference Martha asked Ben to tell her about the book. He said, "So the boy went to a nurse... this was a nice nurse, but he thought it wasn't a nice one. And it was. At the end...he got a new pen" (AT: M/Obs 2/3-18-08/lines 239-241). Martha asked Ben to begin reading the book and as she questioned him, it seemed he had a literal approach to the text. He was giving back the information he read or saw in the illustrations. Ben did not understand that the boy was afraid of the nurse because of all the stories the boy had heard. After they read and talked a little more, Martha sent Ben off to finish reading and called him back later. When he returned, Ben had sorted out some of the story, but was still confused about the role of the nurse. Martha then prompted Ben to use his own personal experiences to try and make sense of the story.

- 1 Martha – So now, we were having a question of why was the kid scared about going to the nurse. So what did you find out as you finished reading it?
- 2 Ben – the nurse wasn't...like the one he thought...he had blue dots and he went to the nurse and then he figured out that she wasn't that way.
- 3 Martha – She wasn't what way?
- 4 Ben – like the
- 5 Martha – The scary nurse?...because
- 6 Ben – Because there was a new nurse
- 7 Martha – Oh, you think there was a new nurse there?

- 8 Ben – Yeah
- 9 Martha – Well, when we read this story, there's an important thing to hear in here. There's supposed to be a nurse at school. In the beginning it says, (reading aloud) *No one has ever seen her. At least no one that ever comes back. They say her office is behind the principal's.* (to student) Do you think no one had ever seen a nurse before in school?
- 10 Ben – No
- 11 Martha – No. Do you think maybe when we're reading a story like this that we need to think about, "Wow, what would really happen here in this story?" Is someone just telling us to make us afraid of the nurse?
- 12 Ben – Yes
- 13 Martha – Do you think someone was telling him to make him afraid of the nurse or all the things? 'Cause those are silly things, you've been to the nurse, right? Is our nurse here like this?
- 14 Ben – No
- 15 Martha – No, we have a nice nurse, don't we? We certainly do. So...when we're reading this story, we need to also bring what we have experienced as far as the nurse to our story, so that we know whether it's really true or not. And look when we get here, there's someone sound asleep. And look at her, does she look like those pictures at the very beginning?
- 16 Ben – No
- 17 Martha – No, she's a very nice nurse, isn't she? And she fixes him all up. And what does he think at the end?
- 18 Ben – She's nice. (AT: M/Obs 2/3-18-08)

In both sessions of Martha's conference with Ben, he was having difficulty understanding the text. As shown above, when Ben came back after he had finished reading, Martha modeled her thinking and explained the underlying premise of the story to him (turns 9, 11, 13). She also tried to connect Ben's knowledge of the school nurse in his school (turns 13, 15) to the story, perhaps expecting that making these connections would be sufficient to facilitate understanding. Her questions, however, were more teacher directed and were answered by Ben with either yes or no (turns 9, 11, 13, 15). Questions were not really used to explore Ben's thinking or his misconceptions, but to see if he was following Martha's explanation. Martha may have felt that the text was too difficult for Ben to construct meaning from and that giving him an explanation was the best recourse.

Martha tended to do more of this one-to-one work in conferences where she could adjust her teaching to address each student's needs at their particular reading level.

Developmental focus in conferences. Martha was also taking on parts of the Reading Workshop (Calkins, 1994, 2000) with students reading independently from leveled texts as she worked with groups or conferred with students. Individual conferences provide time for teachers to differentiate their instruction and work with students at their individual reading levels. During conferences, teachers can assess, give additional instruction, and scaffold students' interactions with text. In addition to using conferences to meet individual needs, Martha also differentiates instruction for students by having students choose books for their book boxes from their reading level in the classroom leveled library. This is current practice in most first grade classrooms in the school and the leveled books each student chose are used for independent reading and in conferences so students are reading books that are "just right." In conferences, Martha enacts her developmental focus by differentiating her emphasis when working with competent and less competent readers. Her conferences with more proficient readers focused on comprehension while the least proficient reader's conference dealt with decoding and accuracy.

For example, in the conference with, Maria, a proficient reader, Martha chose a new book, *Jump, Frog, Jump!* (Kalan, 1989) from Maria's book box. Then Martha asked Maria to look through the book before she read it, which Maria did silently. Martha asked if there was anything Maria did or did not understand after the quick picture walk. Maria said she understood everything. Martha asked her to read and told her to stop

reading if there was something she did not understand. Maria read fluently and accurately with no decoding errors. Martha then talked with her about the story.

- 1 Martha – Okay, now, do you understand the whole story?
- 2 Maria – Um, hm
- 3 Martha – Did you understand how the frog got away?
- 4 Maria – Um, hm
- 5 Martha – What happened?
- 6 Maria – He jumped every time one of the animals wanted to eat him.
- 7 Martha – That’s right and what else do you understand?
- 8 Maria – That...all the animals [tried] to get him, it started with the fly.
- 9 Martha – It did start with the fly, but it ended...when they got here, but he was caught here.
- 10 Maria – Yeah, but then the kids...pick up the frog so he could... be free.
- 11 Martha – Okay, well, look at these kids, these two caught him and that one
- 12 Maria – That one liked him and let him free.
- 13 Martha – Um, what’s our picture telling us here?
- 14 Maria – That the boy’s being quiet and then going to lift the basket because he wanted the frog to be free.
- 15 Martha – I think...that’s absolutely right...and that’s the reason he said, “Jump, frog, jump.” He wanted him to get away, didn’t he? To live another day. This is a very good book. You’re a good reader.
(AT: M/Obs 2/3-18-08)

As can be seen, Martha asked questions about what happened in the text and the illustrations (turns 9, 11, 13) to make sure Maria understood the story, which was in part told through the illustrations. Maria said she understood the story, but Martha drew Maria’s attention to the illustration where only one of the three boys let the frog go (turns 11, 13) to clarify her misunderstanding (turn 10). The conversation was brief, but Martha seemed pleased with Maria’s comprehension of the text and moved her up to the next level for her book selections.

On the other hand, when conferring with one of her at-risk students, Priti, who was also in Reading Recovery, Martha selected a book from Priti’s book box that she had not previously read entitled, *The Haunted House* (Cowley, 1982). Martha directed Priti to take a quick picture walk. In contrast to Maria, who did her picture walk

independently, Priti was encouraged to talk out loud about each picture as she looked through the book. While this may have been her choice, Martha reinforced the idea that Priti should be telling her about the story during the picture walk by saying “You’re talking so quiet, I can’t hear you” (AT: M/Obs 2/3-18-08/line 448). As shown below when Priti read the book, Martha prompted to try and support her problem solving of the word spook (turns 5-10) or told her a few words she had difficulty decoding, such as ghostie (turn 4) and Antonio (turn 14).

- 1 Priti – (reading) *The Haunted House*.
- 2 Martha – Good, *The Haunted House*.
- 3 Priti – (reading) *I am ghosts*
- 4 Martha – You’re right. It does say ghost and it has an ie, ghostie, it’s called.
- 5 Priti – (reading) *I am a ghostie. A big scary ghostie. I live in the haunted house. And I go Boooo! I am a spoke,*
- 6 Martha – Almost
- 7 Priti – Spock
- 8 Martha – ...Do you know this word?
- 9 Priti – Spook (look)
- 10 Martha – Almost, spook
- 11 Priti – Spook, (reading) *A big scary spook owl. I live in the haunted house. And I go Whoooo! I am a monster. A big scary monster. I live in the haunted house. And I go Boo! I am Anton.*
- 12 Martha – Good job
- 13 Priti – *Anton*
- 14 Martha – You might not know this one, Antonio. The boy’s name.
- 15 Priti – (reading) *Antonio. I am a little boy, Antointo. I am in the haunted house. And I’m not scared of you. Shoo, shoo, shoo, shoo, shoo!*
- 16 Martha – Ah, shooed them away...Anything you didn’t understand in the story or did you understand all of the story?
- 17 Priti – Um, I didn’t understand what (pointed to owl)
- 18 Martha – ...A spook owl is somebody that’s kind of scary. Sometimes you use the word spooky...when you were at Halloween, there were spooky houses...a spook owl is kind of like that. It’s kind of just a scary thing. But that was a very nice reading. You did a really good job on that. (AT: M/Obs 2/3-18-08)

With this low reader Martha focused on reading accuracy and decoding or problem solving (spook – turns 6-10), in part because the book Martha chose did not lend itself to

comprehension work. While, Martha listened and supported decoding with Priti, she gave little attention to checking on, or co-constructing meaning, with Priti about the text. However with Maria, the proficient reader, there were no decoding errors in her reading and Martha focused on comprehension with her and clarified any misunderstandings.

In summary, Martha's observed comprehension instruction seemed to vary according to instructional context (whole group, small group, or individual conferences) and the level of the reader. For the most part, Martha's reading comprehension instruction was most effective in her read alouds where she used questions and had students explaining their answers, sometimes to each other (Duke & Pearson, 2002). She also encouraged them to think about what they understood and what they did not understand, which can help develop self-regulation (Baker & Beall, 2009). However, her use of questions to construct meaning did not seem to carry over to her conferences. When conferring, Martha seemed to coach into the book, which came from the level she directed the students to choose from, but, not all leveled books are good for comprehension instruction (Duke & Pearson, 2002; Routman, 2003). So when Martha responded to the book and the child's reading of it, the conference sometimes addressed comprehension and other times focused almost solely on decoding and accuracy.

Martha was varying instruction to meet student needs, as teachers are expected to do, especially in individual conferences, but reading comprehension should be addressed at all levels of instruction, even when students need to work on decoding. Paris and Hamilton (2009) stress, "Teachers should emphasize and teach constrained [such as decoding] and unconstrained reading skills [such as meaning] equally for beginning readers without privileging one over the other" (p. 49). Martha seemed to be using some

current research in her practice, such as questioning, but also continued to be influenced by previous ideas, such as establishing decoding strategies before focusing on comprehension instruction.

Trying new ideas: Martha's response to the professional development. With her classroom practice firmly established, Martha's expectations for participation in the professional development were to deepen her understandings, as she noted in her first interview.

I'm always...looking for new ideas and ways to get to a deeper understanding of my kids or get them to deeper understand[ings] themselves.
(AT: M/Int/2-28-08/lines 86-87)

The new ideas in the professional development that Martha seemed to pick up on were some of the concepts we discussed about engaging students with the text. In particular, the idea of having the students read a few pages at a time during small group lessons so that student thinking could be explored and explanation encouraged seemed to resonate with Martha. Observations of Martha's small group instruction before and during the intervention show how she changed her teaching to incorporate the read-stop-talk strategy and prompt for student thinking.

Before the intervention, Martha seemed to follow a similar pattern for small group instruction. First, she would introduce texts in one session and assign independent reading. Then at the next small group session, she would lead a discussion about the story and introduce a new book. For example, Martha called a small group of seven high-average proficient readers up to the front carpet area to meet with her after her whole group read aloud of *Lost* (Johnson & Lewis, 1996) where the objective was to understand the character's feelings. Martha continued with this objective when she

opened the small group with a very short conversation about the book *The Dinosaur Hunt* (Doyle, 2000), which the students had previously read independently.

- 1 Martha – Okay, so when you read this book *The Dinosaur Hunt*, tell me if you understood how the character felt or if you did not understand.
Nadia.
- 2 Nadia – The character Joey couldn't sleep because he didn't have his dinosaur (inaudible)
- 3 Martha – Okay, who can help more on that? Henry?
- 4 Henry – Joey couldn't sleep so he thought of the ten little monkeys.
- 5 Martha – Was it Joey that thought of the ten little monkeys?
- 6 Henry – Pete, Pete
- 7 Martha – Pete thought of the ten little monkeys, right. Do you understand how the characters felt? In other words, have you ever felt that same way? Mohit, you have. Can you explain to me how you felt the same way as our character, Joey, when he couldn't find his dinosaur?
- 8 Mohit – One time I was looking for my reindeer and my brother took it and he wouldn't share it.
- 9 Martha – Okay, so how did you feel inside? (inaudible)...and upset because you couldn't find your reindeer, right?... Okay, so our character in our story might have felt the exact same way....So when we're reading stories...we think about how the character feels and how...I may have felt that same way because I might have had that happen, such as, my brother hiding my reindeer... Well, boys and girls, with fiction books, we need to be thinking about the characters and how the characters are feeling because that helps us understand a little bit more about what's going on in the story. Today's story though, book that I have for you...is a non-fiction book. (AT: M/Obs1/3-11-08)

As can be seen in the conversation, Martha touched on the character's feelings (turns 1, 3) and spent most of the time encouraging the students to make personal connections (turns 7-9) between their own experiences and those of the characters in the book. She then introduced a new book. It seems that the readers were expected to construct meaning when they read independently and Martha only needed to check on her objective of how the character felt (turn 1, 3) and emphasize connections (turns 7-9) to facilitate comprehension for the students.

This was the same format Martha used with her second small group of low-average students who had been reading *Bully Bear* (Jarman, 2000). Martha had previously introduced the book and had them read independently at their seats before this small group session. In keeping with her objective of understanding how the character felt, Martha opened the group by asking about the characters' feelings. As she called on individual students, some students explained why the character felt that way and Martha prompted them to explain further.

- 1 Martha – Do you think...Bully Bear...should be that greedy?
- 2 All – No
- 3 Sara – He should buy his own stuff.
- 4 Martha – Yeah. How did the characters in our story solve this problem that they had?... John, who came along and helped the characters?
- 5 John – Moose
- 6 Martha – ...The moose...How would you describe Moose?...
- 7 John – Helper.
- 8 Martha – ...Is that another word to describe a character? Yeah, helping, helpful. And at the end of the story, do you think Bully Bear learned a lesson?
- 9 All – Yes
- 10 Martha – What lesson did Bully Bear learn?
- 11 David – Not to take things from other people.
- 12 Martha – In our school...how do you think we might have solved this problem? If Bully Bear had taken things from us, what would have been the first thing that we [would do]? (AT: M/Obs 1/3-11-08)

As can be seen, the focus for the discussion was on feelings and personal connections, but there was little probing of student thinking. Martha asked direct questions (turns 1, 4, 6, 7) and students often responded with one word answers (turns 2, 5, 9). For example in turn 4, Martha asked who helped and John responded with the name of the character, Moose (turn 5). Sara (turn 3) and David (turn 11) did give full sentences in response to Martha's questions, but the brief conversation followed a typical IRE discourse structure with students giving the answers that Martha expected.

As these small group observations indicate, Martha's comprehension instruction tended to be to check on the students' understanding of characters' feelings, touch on a few elements of the story, and encourage the students to make personal connections. If there was any construction of meaning, it seemed that Martha assumed it was done during independent reading.

Scaffolding in small group instruction. This pattern of small group instruction changed, however, after Martha had been participating in the intervention. Instead of having the students read the text independently, she began using the read-stop-talk structure and discovered what students were thinking may not have been what she expected, as she noted in the fourth weekly meeting.

I was doing this one group, the misconceptions...were coming across. I'm going, "Okay, that's not going very well...and taking them back into the book...even taking them back into the book, they were not sure what was going on. (AT: CES 4/4-9-08/lines 66-69)

This change in her practice could be seen in my third observation when she was working with a group of average readers. Martha introduced *Nate the Great* (Sharmat, 1972) by asking the students what they knew about Nate. After gathering some information, Martha had them read three pages. Then she had the students stop and again asked individual students what they were thinking.

- 1 All – (reading) *"I have found lost balloons, books, slippers, chickens. Even a lost goldfish. Now I, Nate the Great, will find a lost picture."* "Oh, good," Annie said. "When can you come over?" "I will be over in five minutes," I said. "Stay right where you are. Don't touch anything. DON'T MOVE!" (p. 10-11)
- 2 Martha – Okay, Henry,... What were you thinking about as you read...this part of the story?
- 3 Henry – Chickens... balloons were lost...one book was lost.
- 4 Martha – Alright, were they lost?
- 5 Henry – Yeah.
- 6 Martha – They were the things that were lost? Samir.

- 7 Samir – He was at a party because I know that it was balloons and...some things at a party.
- 8 Martha – Okay, all right, mmm, anything else?...Let's go back...to our story ...and reread. Now on page 9, it says, Annie says, (reading aloud) "*I've lost a picture. Can you help me find it?*" (to students) Okay, now page 10. Samir, you think he's going to a party. Would you read that out loud for me?
- 9 Samir – (reading) "*I have found lost balloons, books, slippers, chickens. Even a lost goldfish. Now I, Nate the Great, will find a lost picture.*" "*Oh, good,*" Annie said.
- 10 Martha – Oh, good. Let's stop right there. So, Samir, is he going to a party? ...Did he go to a party? What does it say? Who can help Samir understand?...Henry?
- 11 Henry – Maybe there's somebody hiding behind a book...
- 12 Martha – Molly, what are you thinking?
- 13 Molly – Someone's trying to play a trick on him.
- 14 Martha – You think someone's trying to play a trick on him. Okay. Well, I think there's some confusion here because Nate the Great is a detective. And what does a detective do?...And on page 10 it says, Nate the Great says, (reading aloud) "*I have found lost balloons, books, slippers, chickens. Even a lost goldfish. Now I, Nate the Great, will find a lost picture.*" "*Oh, good,*" Annie said. (to students) So did Nate the Great go to a party? No, those were the things he already found. (AT: M/Obs 3/4-4-08)

As can be seen above, when Martha was listening to students' thoughts about the text (turns 2, 6) a misinterpretation of the illustration, which overrode the text, surfaced (turn 7). Some students thought Nate was at a party because there were balloons in the picture. To clarify, Martha had the student, Samir, reread the text (turn 9). As she asked other students to help explain, it became clear that some of them were confused also (turns 11, 13). For example in turn 13, Molly stated that she thought someone was trying to play a trick on Nate. Martha then began to guide the students through the text explaining what had happened (turn 14). She continued to explain, guide them with questions, and take them back to the text so they would understand who Nate the Great was and that Annie wanted him to find a lost picture. Then the students were sent back to their seats and told they would work on the book again the next time they met.

After the group returned to their seats, Martha commented to me, “Well, that bombed” (AT: M/Obs 3/4-4-08/line 311). Martha seemed genuinely surprised that some of the students had misconceptions, perhaps because they had been able to respond correctly to the teacher directed question that she typically asked. I assured her that by asking what the students were thinking she was able to uncover misconceptions the students had and could then help them understand what the text meant.

In the small group that immediately followed the one above, six of Martha’s low-average readers were reading “Spring,” a story in *Frog and Toad Are Friends* (Lobel, 1979). Martha continued to use the read-stop-talk structure, but changed her prompts to ask the students what happened in the story instead of what they were thinking, possibly an attempt to avoid misconceptions that the open-ended prompts had brought out in the previous group.

- 1 Martha – Frog’s knocking on the door. Toad’s still sleeping...So as I read the next two pages, I’m going to think about what I just read...and think about, “Was I right about what I just read about or does reading the next couple of pages change my mind?” So now read pages six and seven.
- 2 All – (reading) *Frog walked into the house. It was dark. All the shutters were closed. “Toad, where are you?” called Frog. “Go away,” said the voice from a corner of the room. Toad was lying in bed. He had pulled all the covers over his head. Frog pushed Toad out of bed. He pushed him out of the house and onto the front porch. Toad blinked in the bright sun. “Help!” said Toad. “I cannot see anything.”*
(p. 6-7)
- 3 Martha – Stop right there...Did your thinking change or did your thinking stay the same? What happened after you read these two pages? Akash?
- 4 Akash – Toad wanted to, didn’t want to go outside. He just wanted to stay asleep.
- 5 Martha – What would be the reason he would want to stay sleeping?...Priti?
- 6 Priti – Maybe he’s sleepy.
- 7 Martha – Maybe he’s still sleepy...Katy?
- 8 Katy – Maybe he did something all night and she wants to get some sleep now.
- 9 Martha – He wants to get some sleep now. What do you know about real toads

and frogs in the spring?...Think about that, see if that helps you understand why Toad might not want to get up.

10 Akash – I think hibernating. (AT: M/Obs 3/4-4-08)

As the students read a few pages, Martha had them stop and guided them to tell her about what they thought was happening and why. She then summarized the text thus far and modeled the kind of questions they should be asking themselves as they read to confirm or change their thinking about the story (turn 1). As they talked about the next two pages, Martha had students explain why they thought Toad wanted to stay asleep (turns 5, 7). The students shared their thoughts and Martha led them to reflect on their background knowledge about frogs and toads hibernating (turn 9) and their own personal experiences of wanting to stay in when the weather is cold or just wanting to sleep in. In this way, Martha co-constructed the meaning of the text with the students.

In these two groups, Martha seemed to be attempting to explore student thinking more than she had before the intervention. Using the read-stop-talk structure and discovering the students' comprehension problems seemed to help her reflect on the complexities of comprehension instruction, which she shared in our fourth weekly professional development meeting when looked at the transcript of her small group reading of *Nate the Great* (Sharmat, 1972).

Martha – They read the book and none of them needed...help...as far as decoding, so they can decode it. But...within the first three pages they had not an idea of what was going on in the story...

Linda – You were...trying to get to...what they were thinking, but it's really hard sometimes to get them to the idea that this has to connect to this and all of this goes together

Martha – That the pages connect, that it's a continuous story.... I had to arbitrarily choose places to stop and talk about it [Nate the Great]....Do you let them read the whole book and then talk about it or do you just use a few pages...I was wanting to try...a few pages...and think about...

Linda – We didn't use to focus so much on comprehension

Martha – Not in first grade definitely.

Linda – But I think now...that we are...truly trying to think about kids trying to build a representation for the whole story, not just monitoring for the word or the sentence...I think it makes us realize, “Oh, now I can see why they end up with big time comprehension problems in later grades”, because the roots of them are here.

Martha – And...I’m definitely guilty of it, because we haven’t started those roots growing. (AT: CES 4/4-9-08/lines 412-441)

In my fourth observation of Martha’s practice following this conversation in our professional development meeting, she continued to use the intervention’s read-stop-talk structure and open-ended prompts. In this small group with five of her most proficient readers, Martha introduced the characters’ names in “Fox on Stage” a story in *Fox at School* (Marshall, 1996) and had students make predictions based on the title and pressed them to explain their comments further.

1 Martha – Now in this first story,...what do you think about Fox on Stage?

2 Maria – He’s going to go on stage.

3 Martha – ...What does that mean go on stage, Ben?

4 Ben – Show everybody or they’re practicing or something

5 Martha – Practicing what? ...

6 Ben – Like practicing what you’re doing like for a show or something.

By prompting Ben to elaborate (turns 3, 5), Martha encouraged him to give explanations beyond the literal interpretation of the title. As the students read a few pages and stopped to talk, Martha often asked, “What are you thinking?” (turns 8,12) or “Why do you think that?” (turns 10, 14). In the conversation that occurred after reading the first three pages of the book, Martha continued to delve into the children’s thoughts.

7 All – (reading) *Fox wanted a part in the class play. “We must be fair,” said Miss Moon. And she put everyone’s name into a shoe box. “Let’s see who will play the pretty princess,” said Miss Moon. She drew out the first name. “The pretty princess will be played by Carmen,” said Miss Moon. “Oh, goody!” said Carmen. “And now for the part of the mean dragon,” said Miss Moon. Fox held his breath. “The mean dragon will be played by Junior,” said Miss Moon. “I’ll do my best,” said Junior. “And now for the part of the handsome prince,” said Miss Moon. Fox bit his nails. (p. 5-7)*

- 8 Martha – Nadia, what are you thinking so far?
 9 Nadia – Fox really doesn't want to be the mean dragon.
 10 Martha – He doesn't want to be the mean dragon. What made you think that?
 11 Nadia – Because he held his breath.
 12 Martha – He held his breath, so you don't think he wants to be the mean dragon. What else are you thinking, Ben?
 13 Ben – He wants to be part of the show.
 14 Martha – He wants to be part of the show. What makes you think that?
 15 Ben – When he held his breath.
 16 Martha – What does that mean when he held his breath and how did you come to that conclusion? How did you come with that idea that he wants to be part of the show because he was holding his breath?
 17 Ben – Because he wanted to be the mean dragon.
 18 Martha – So you think he wanted to be the mean dragon.
 19 Ben – Yeah
 20 Martha – So we have a difference of opinion. Is that all right for readers to not see the same thing in a story?
 21 All – Yeah
 22 Martha – It is. So that's why we have a discussion. So why do you think, Nadia, that he does not want to be the dragon?
 23 Nadia – ...in the pictures, he doesn't want to be the dragon
 24 Martha – Okay, so you were looking at the pictures.

To encourage the students to share their ideas, Martha seemed to build trust by allowing for differences in opinions (turns 9, 17) and asked the students, Nadia and Ben, to explain their thinking. As the group continued, Martha had the students read a few more pages and she uncovered misconceptions when she asked them for their interpretations of the text (turns 26-30).

- 25 All – (reading) *“That part goes to Fox,” said Miss Moon. “Hot dog!” said Fox. “Rats,” said Dexter. “Everyone else will play flowers and trees,” said Miss Moon. “Gosh,” said Fox. “The handsome prince!” “Now, now,” said Miss Moon. “It is a hard part. You must learn it by heart.” “Don't worry,” said Fox. (pp. 8-9)*
 26 Martha – So, Ali, what's going on now? What are you thinking now?
 27 Ali – ...Fox wants to be the mean dragon
 28 Martha – Is that what he said? Fox wants to be the mean dragon? Hmm.
 29 Nadia – No
 30 Ali – No, he wants to be the hot dog
 31 Martha – He wants to be the hot dog. Let's go back. Ali, read the top part. Well, actually let's go back to the part you read before. Because sometimes when we have confusions and we're not certain, things

- don't make sense, we go back to the story and reread. So I think Ali's a little confused here, so let's go back. Ali, read this.
- 32 Ali – (reading) *"I'll do my best," said Junior. "Now for the part of the handsome prince," said Miss Moon. Fox bit his nails.*
- 33 Martha – ...So now she's pulling the part for the handsome prince.
- 34 Ali – *"That part goes to Fox," said Miss Moon.*
- 35 Martha – So now, what part did he get?
- 36 Ali – The handsome prince
- 37 Martha – The handsome prince, then what did he say?
- 38 Ali – Hot dog
- 39 Martha – Do you ever say hot dog?...No, you never said that? You know what it means?...
- 40 Maria – You're so excited you that say a word...
- 41 Martha – How do we know that he's happy? Look at the print. There is an exclamation point behind, after the word dog. *"Hot dog!" said Fox.* Do you think he's happy about it? (AT: M/Obs 4/4-8-08)

As can be seen in turn 27, Ali misinterpreted the text when Fox got the part of the handsome prince or was still tuned into the previous conversation about the mean dragon. Martha gave a negative evaluative response by saying, "Is that what he said? Fox wants to be the mean dragon? Hmm." (turn 28), which led to another misconception (turn 30) when Ali said Fox wanted to be a hot dog. Rather than calling on another student to answer, Martha led the group back to the text to help clear the confusion. She modeled the thinking and questions the students might use to guide themselves through the confusing passage (turns 31-41) to construct the meaning as when she said, in turn 33, "So now she's pulling the part for the handsome prince," or in turn 35, "What part did he get?". Using the read-stop-talk structure and open-ended prompts, Martha encouraged students to think about text. This strategy also helped her discover students' misinterpretations and scaffold their construction of meaning by taking them back to the story and showing them how to interpret the text. This pattern of interaction was seen in the observation of the three small groups she led during the intervention.

Before the intervention, Martha's small group work seemed to be previewing, assigning the reading to be done independently, and then having a brief conversation about the book the next time she met with the group. During the intervention Martha began to use the read-stop-talk structure and open-ended prompts to ask students what they thought and why as they constructed meaning during the reading of the text.

Summary. As an experienced teacher with a well-established philosophy of her own, Martha was already exploring ways to improve comprehension. It seems that the intervention may have helped Martha gain some new insights about the complexity of teaching comprehension. In our last weekly meeting she shared:

And the more... we talk about it, the more I read about it, the more I teach it, the more I know that I don't know about reading...It is such a complicated process and every child...approaches the process of reading a different way. I mean,... every kid that we have in there, comes to it in a different way because of all their backgrounds and so teaching reading is...just a really complicated process.
(AT: CES 8/5-8-08/lines 101-106)

She also seemed to be having new thoughts about the importance of comprehension in learning to read.

I'm wondering just sitting here if the children that we perceive as ...natural readers...maybe they're the ones that actually comprehend...bring...more meaning to the text at that time, no matter what their word decoding skills are and because they're bringing so much more meaning to the text, it helps them decode faster and use strategies faster. (AT: CES 8/5-8-08/lines 26-33)

Martha did consider making some changes in her practice as a result of the study as she expressed at the last weekly meeting.

It's making me think about...next year and starting comprehension in the read alouds and in the group settings along with teaching them how to read...probably sooner than I might normally do it...Deeper comprehension. Let's put it that way. I always did comprehension but it was mostly...the surface to...see if they were following the story line...maybe more...deeper comprehension, "Why do you think the character did this?" or...probing a little more.
(AT: CES 8/5-8-08/lines 7-14)

At the conclusion of the study, Martha planned to do more with talk and prompting for student thinking.

I need to do a lot more at the beginning of the year, the oral turn and talks so that they're thinking, "What are you thinking now? What are you thinking about the story?" Hopefully to get them engaged in the story....
(AT: Int/M/5-15-08/lines 87-89)

A year later, Martha reported that while she had used turn and talk before the intervention, she used it more the year following the intervention. As for using the prompts to explore student thinking, Martha responded that she had "definitely used more of this type of question...[and] responses have improved student's thinking" (Doc: M/email/5-8-09).

Nora. Nora began working at Riverview Elementary School as a student teacher in second grade. She was then hired to teach first grade and has taught at this level for four years now. As the least experienced teacher in this study, it is not surprising that Nora's goal as a participant in the study was to strengthen her own knowledge base.

I just hope to be more...confident in...what I know and how to teach it to them and...also...what do I do for particular kids who are struggling? How do I get them up to where they need to be? So maybe, different strategies or...different approaches to take to teach comprehension. (AT: N/Int/2-27-08/lines 92-96)

At the beginning of the intervention, Nora seemed hesitant to speak at the weekly meetings. In our first meeting, for example, she said almost nothing. However, her participation did seem to grow throughout the study. In the two weekly meetings following our first session together, Nora added to the conversations several times. For example, in the second weekly meeting, Nora shared an idea she had tried in her current practice to encourage students to talk.

1 Nora – Something that I did this year and I don't know if this is

right or wrong...I had a couple of kids who were like that [reluctant to talk]. What I did was I...stuck them in lower groups then they actually were so that it was easy for them and it worked because then they were like, "I know this" so they started talking more....I only did it for...a week... and then the next week I bumped them back up to where they were supposed to be and they were a little bit more confident and talking with the group. So I don't know, I just tried that out and it might be something to do, too.

2 Martha and Chuck – I did the same thing. (CES 2/3-18-08/lines 245-255)

By the fourth weekly meeting, it seemed that Nora felt more comfortable participating in the discussions. When I opened the fifth session with information on talk, it was Nora who was the first one to share some of the things she had been attempting in her own classroom.

We were talking about a book and...one student said something and I asked another student, "Do you agree with what she said?" And he went on this whole tangent about himself. So again at the end of that I said, "Okay, so I'm hearing parts of what Nadia just said, so do you agree with her statement?" trying to get [them] back to listen to what she just said....I don't think it [worked], but...I'm just trying to get them to listen, "Oh, listen to what she just said....You're saying that. Look you guys have similar thoughts." (CES 5/4-16-08/lines 55-61)

In all but one of the four remaining weekly professional development meetings, Nora was one of the most active participants. In the weekly conversations, Nora shared ideas about her practice, expressed concerns, or discussed what she was trying in her classroom.

While Nora became more verbal in the weekly sessions and seemed to take on some of the structures of the professional development, her comprehension instruction did not change much over the course of the intervention. Looking at her understanding of comprehension instruction and how she teaches it gives some insights when examining her response to the professional development in more depth.

Nora's understanding of comprehension. At the time of the study, Nora was working on her master's in reading and language arts at a nearby university. So, it is

perhaps, not surprising that in her first interview before the professional development began, Nora used some of the current literacy buzz words, such as “making connections” and “strategies,” when describing reading comprehension. However, even though Nora used the buzz words when speaking about reading comprehension, she seemed to speak in general terms about reading comprehension.

We’ve been talking about comprehension the last two classes so the fact that when you ask me things about comprehension and I’m like mmm, that’s not a good sign. (AT: Int/N/2-27-08/lines 90-92)

Nora acknowledged that there were a lot of components to comprehension and defined it as: “making sense of a text and also...students...put (ting) some of themselves into the text when they’re comprehending so they’re using their background knowledge, their prior knowledge to understand what they’re reading” (AT: Int/N/2-27-08/lines 29-31).

As we continued to talk, her ideas about comprehension also encompassed making connections and comprehension strategies.

I guess part of comprehension is when we teach making connections to stories...you have to relate to the story and kind of put yourself into it to understand it...I guess that’s more strategies so I don’t know if...predicting, questioning, and all that stuff are really comprehension. So, I don’t know...I guess that would be in the beginning of the year, more of when readers read, they ask, “Does it make sense?” (AT: Int/N/2-27-08/lines 37-41)

Nora also spoke of some of the techniques she uses for teaching comprehending at different levels of instruction.

I do some [comprehension instruction] through read aloud when I do a think aloud, so I... model comprehension a lot. I talk about comprehension when I do individual conferences, but I find it’s kind of difficult at times to do comprehension with groups, only because it’s hard to tell what each kid is getting out of the text. (AT: Int/N/2-27-08/lines 52-55)

When working with individual students who are having difficulty comprehending, Nora said,

Sometimes it's because...it's too difficult for them. The story itself is too complex. It's not just right for them. But if the story's just right, then I try...making connections, or thinking about prior knowledge or what do you know about this, or using the pictures...but usually...if kids don't understand it... it's just too difficult for them. (AT: Int/N/2-27-08/lines 63-67)

These comments would suggest that Nora knows that reading comprehension is complex. She is aware of some of the reading strategies that are emphasized when teaching for comprehending and the early monitoring strategy of asking, "Does that make sense?" She seems to be exploring ideas about comprehension and techniques to teach it as evidenced by her reflections on how she instructs and how she works with students who have difficulty. This level of understanding of reading comprehension may be somewhat typical of a less experienced teacher who often focuses on his/her teaching when building his/her knowledge base before attending to issues of students and student learning (Hammerness et al, 2005). From my observations of Nora's teaching, her understanding of reading comprehension may not yet have developed to a theoretical depth of how all of the components of reading comprehension go together and how to impact student learning. Similarly, her teaching seems to reflect this developing content and pedagogical knowledge.

Nora's teaching. Nora consistently followed the format of the of the Reading and Writing Workshop approach (Calkins, 1994, 2001), which includes a whole class mini-lesson, independent reading by students, partner reading, conferencing, small group work, and a teaching share time to close the workshop. Nora varied the order of the elements, but usually started her reading workshop by conferring into buddy reading or having the small group lesson while the other students read independently from their individual book bins. This was followed by a whole group lesson, which might be

labeled her mini-lesson. After the whole group lesson, Nora did buddy conferences or small group instruction whichever had not been done previously.

Over my eight observations of Nora's reading workshop, there were several techniques - demonstrating, questioning, and vocabulary development - which were a consistent part of her approach to teaching comprehension. Nora demonstrated in all the instructional settings and it was in the whole group component that this technique was most evident. Questioning was also seen in all of the instructional events as Nora attempted to guide students' comprehension or support their problem solving. Understanding vocabulary was a prime focus of Nora's instruction, perhaps indicating a belief that if students know what a word means they will understand the text. These three components were strengths across Nora's practice. However, some of the teaching choices she made seemed to reflect her incomplete understanding of reading comprehension when using these strategies.

Demonstration. Demonstration is a powerful instructional technique as Calkins (2001) reminds us, "It is especially powerful if, instead of *telling* students about a strategy we use, we actually *demonstrate* that strategy" (p. 90). Nora gave demonstrations often to show her students how she constructed meaning using the strategy or skill she was targeting. But as she expressed in the fourth weekly meeting, she was not getting the response she hoped for from her students.

How do you help yourself when you're reading?...This is...the beginning of the year strategies, and they'll tell me. They can name stuff, stretch it out,...then [I say] find the tricky part and then...they stare at it... You have all these things that you can do but you're not trying them....That's what's frustrating me, so I just keep doing it, week after week. "What can you do? How do you do it?" And I've been modeling a lot, too....The other day I was modeling strategies and I asked them, "Okay, what did I do?" and they start naming everything - "Oh, you

reread, oh, you used the picture.” But then they don’t use it themselves. (AT: CES 4/4-9-08/line 89-98)

Over the course of the eight observations, Nora used the technique of demonstration most often in her mini-lessons or large group read alouds as she showed her students the strategies she wanted them to use.

In the whole group portion of her reading workshop, Nora typically had an explicit teaching point and often demonstrated that reading strategy several times for the students. For example in Nora’s first observation, which was after our first weekly meeting, her teaching point was explicitly stated:

Today I want to tell you about something else that readers do when they’re reading. Up here I wrote, readers stop and think after chunks of text... What I’m going to do is, I’m going to read a little bit of the story to you. I’m going to read a chunk and then I’m going to show you what I’m thinking.
(AT: N/Obs 1/3-12-08/lines 56-81)

Nora stopped several times to demonstrate the teaching point as she read aloud from *Horton Hears a Who* (Seuss, 1954).

1 Nora – (reading aloud) *So he plucked up the clover and hustled away. Through the high jungle treetops, the news quickly spread. He talks to a dust speck! He’s out of his head! Just look at him walk with that speck on that flower. Horton walked worrying almost an hour. “Should I put this speck down?” Horton thought with alarm. “If I do these small persons may come to great harm. I can’t put it down and I won’t. After all, a person’s a person, no matter how small.* (to students) Now for this chunk of text, I’m still thinking, Horton really thinks there’s like a whole family on this speck of dust. This is still sounding crazy to me and he’s carrying it around and protecting it. Hmm, I see that you’re thinking, too, and in just a moment I’m going to give you a chance to share your thoughts. (reading aloud) *Then Horton stopped walking. The speck of dust was talking. The voice was so faint he could just barely hear it. “Speak up, please,” said Horton. He put his ear near it. “My friend,” came the voice. “You’re a very fine friend. You’ve helped all of us folk on this dust speck no end. You’ve saved all our houses, our ceilings and floor. You’ve saved all our churches and grocery stores.* (to students) Hmm, so now I want you to turn to the person next to you. Do you think that there’s really people on that speck of dust? What do

- you think?
- 2 All – (Turn and talk)
- 3 Nora – All right, turn towards me. Give me a thumbs up if you and your partner thought, there’s people there. Give me a thumbs down if you say, no way, that can’t be. All right, hands down. I heard some of you using things that you already know about the story. So we call that our background knowledge. So you’re using things you know...I heard Mike saying, “I saw this cartoon.” So he already knows, right? John was just talking to me and he said, “I saw it on a commercial.” So you’re putting all these things together to make your guesses and your predictions. (AT: N/Obs 1/3-12-08)

Nora showed her thinking in response to the text as in turn 1 when she said, “Now for this chunk of text, I’m still thinking, Horton really thinks there’s like a whole family on this speck of dust. This is still sounding crazy to me and he’s carrying it around and protecting it.” She then cued the students to the fact that they would soon be talking to each other about whether there were people on the speck of dust (turn 1). After reading on for a few moments, Nora asked the students to turn and talk in order to have each student share his/her ideas with a partner (turn 2) to give everyone practice using the strategy she had demonstrated. She then engaged the whole class again by asking them to signal with at thumbs-up or a thumbs-down what they thought (turn 3).

At the end of this mini-lesson, Nora reiterated her teaching point, which was somewhat different than personal response teaching point she had previously stated and demonstrated. She linked the strategy to the students’ work by saying,

But today, when you go off to read on your own, I want you to think about how readers stop and think after chunks of text. So after parts of their book, they stop and they think, “What’s going on? What’s happening?” So the more you think about the story, the better you’re going to understand what’s happening. So today when I’m walking around and you’re independently reading, I want to see and hear you stopping and thinking about your story.
(AT: N/Obs 1/3-12-08/lines 169-174).

The original teaching point and demonstrations throughout the lesson had shown Nora's thinking more as personal response to the text, such as in turn 1, "I'm still thinking, Horton really thinks there's like a whole family on this speck of dust. This is still sounding crazy to me and he's carrying it around and protecting it." However she told students that they need to stop and think, "What's going on? What's happening?" which would take students back to the text to make sure they created a representation of the events that just occurred in the story before reading on.

In this lesson, Nora was explicitly demonstrating the thinking that she wanted her students to do by stopping and saying, "I'm thinking..." to differentiate her thoughts from the text. After the turn and talk, instead of highlighting comments that were similar to her demonstration and the teaching point and might link back to the text, Nora chose responses like, "I saw this cartoon" in turn 3. The turn and talk could have been used to assess the effectiveness of her demonstrations as she listened in on the student talk. It is not clear whether this teaching choice reflects a lack of understanding of reading comprehension or of the purpose of the turn and talk technique. By pointing out the students' use of random background knowledge, it might not be clear to them that construction of meaning is text based, but it does seem to fit with Nora's emphasis on personal connections as important to comprehending. While Nora demonstrated several times, many students only spoke once to a partner. Individual responses by students who are called on limits the opportunities for all students to practice the strategy Nora was teaching, which may indicate a focus on her teaching, but not on what students need to do to enhance their learning.

Nora also occasionally demonstrated comprehension strategies in her small group lessons as shown in this excerpt when she was working with Sam and Jenna, two proficient readers, as they read *Corduroy* (Freeman, 1968).

- 1 Sam and Jenna – (reading) *He flashed his light under and over sofas and beds until he came to the biggest bed of all. And there he saw two fuzzy brown ears sticking up from under the cover. “Hello!” he said. “How did you get upstairs?” The watchman tucked Corduroy under his arm and carried him down the escalator and set him on the shelf in the toy department with the other animals and dolls.*
- 2 Nora – ...how do you think Corduroy feels right now? Because a lot just went on, didn't it? How do you think he's feeling now? Jenna?
- 3 Jenna – Sleepy
- 4 Nora – What makes you think he's sleepy?
- 5 Jenna – Because he has his eyes closed and...the clown looks like that's a pillow
- 6 Nora – What are you thinking? Do you agree with her or are you thinking something different?
- 7 Sam – (shook his head no)
- 8 Nora – Do you have a different thought about how Corduroy's feeling? Okay, well I had a different thought. And is there a right answer to this question? No, this is what we're thinking as readers. So as a reader, I was thinking, wow, he just went on this whole journey. He got upstairs, he thought he found his button, he starts knocking stuff over, and then after all that, he gets brought right back to where he started without that button. I was thinking, wow, he must be very disappointed right now. Does that make sense? Yeah, but so does he could be tired also from all that stuff, so that makes sense.
(AT: N/Obs 5/4-16-08/lines 124-144)

After eliciting Jenna's idea (turn 3) and why she thought Corduroy felt sleepy (turn 5), which seemed to rely on the picture and not the text, Nora tried to encourage Sam to share his thinking (turn 6) by asking, “What are you thinking? Do you agree with her or are you thinking something different?” As he was reluctant, Nora demonstrated her own thinking about how Corduroy was feeling and the events that happened in the story to support her idea (turn 8). Nora demonstrated for her students by showing the thinking

and strategies she wanted them to take on, but their engagement was limited to answering her questions, which did not necessarily take them deeper into the text. Therefore, the students heard Nora's demonstration, but missed out on the guided practice needed for them to begin to take on the strategy and link Corduroy's feelings back to the actions or events in the text.

Demonstration was used by Nora most often in the whole group lessons when she was reading aloud to the students where she would show students several times how to use the particular strategy that was her teaching point for that lesson. However, across all the lessons, Nora did most of the work to construct meaning or, perhaps, called on individual students, which limited the effectiveness of the demonstration because all of the students did not practice using the strategy. There were also times when her lack of content knowledge for reading comprehension seemed to keep her demonstrations and instruction at the surface level. For example, when Nora was reading *Horton Hears a Who* (Seuss, 1954), she demonstrated personal response when she may have intended to have students stopping to make sure they knew what was happening in the story. After the turn and talk, she highlighted random background knowledge instead of talk that would show students how their thinking or personal response should relate back to the text. Although Nora was demonstrating in many of her lessons, these teaching moves did not seem to take students deeper into the text to construct meaning.

Questioning. Questioning was used by Nora in all of her literacy events for two different purposes: to support problem solving or to direct responses. In a conference or occasionally in a small group, Nora would use questions to encourage the students to monitor and use problem solving strategies. For most of the questioning interactions,

however, Nora tended to use the traditional classroom discourse structure of teacher initiation, student response, teacher evaluation or feedback discourse model (IRE or IRF) (Cazden, 2001) to direct or guide students to the response she expected.

Using questions to help children problem solve was one of the primary techniques that Nora used when she conferred with children and occasionally in small groups. Some conferences were with a group of two partners while other conferences were held one-on-one with individual students. Most of the conferences dealt with problem solving or decoding a word and not meaning, as shown in this excerpt from a buddy conference with two average readers, Lisa and Nadia in the first observation. The girls were reading a book about a cat and Lisa was stuck on the word “stripes.”

- 1 Nora – So when you’re reading and it doesn’t make sense any more, you need to stop and what’s a strategy that you can do? If that wasn’t making sense to you, what could you do?
- 2 Lisa – (no response)
- 3 Nora – What do you think Nadia? Do you want to help her out? What could you do? If you get to a confusing part and you go, huh? Don’t tell her the word, what’s a strategy? What can she do when she’s sitting alone?
- 4 Nadia – She could, um she could read half of the part and then read the other part of it.
- 5 Nora – Oh, so Nadia is suggesting maybe you could go back and read a little. Why don’t you start from the beginning of the sentence again, okay?
- 6 Lisa – (inaudible, but probably rereading sentence)
- 7 Nora – All right, skip it and go on. That’s another strategy. We can skip the confusing word
- 8 Lisa – said the (inaudible)
- 9 Nora – All right, let’s go on here, let’s look at the picture. Can anything in the picture help us?
- 10 Lisa – The cat
- 11 Nora – So looking at the cat, what does the cat have?
- 12 Lisa – Stripes
- 13 Nora – Stripes, does that look like stripes? Would stripes make sense?...So Lisa, what’s one strategy that you learned today? That when you get to a confusing part, what can you do?
- 14 Lisa – Sound it out
- 15 Nora – Did we sound it out today?...Okay, so maybe looking at the picture

helped. (AT: N/Obs 1/3-12-08)

As can be seen in this instance, Nora prompted Lisa to take action when she came to a word she did not know by saying, “If that wasn’t making sense to you, what could you do?” (turn 1). Lisa was not responsive, so Nora elicited Nadia’s help (turn 3) and continued to encourage Lisa to use the problem solving strategies of rereading, skipping the word and reading on, as when she said, “Skip it and go on. That’s another strategy. We can skip the confusing word” (turns 5, 7). When this suggestion did not work, Nora directed Lisa’s attention to the picture (turn 9). Lisa still could not figure out the word, so Nora raised her level of support to tell Lisa explicitly what to attend to in the picture by saying, “So looking at the cat, what does the cat have?” (turn 11). Still emphasizing strategies, Nora concluded the conference by using the questions Lisa should ask herself to monitor whether the word “stripes” is correct and tried to get Lisa to articulate a helpful strategy (turn 13). In this interaction, Nora talked more than the girls did and focused on problem solving strategies, while Lisa seemed to just answer Nora’s questions (turns 6, 8, 10, 12, 14) rather than taking an active role in learning to problem solve issues around the text. Nora drew children’s attention to strategies to problem solve, but her use of questions often meant that the children did not really practice the word solving strategies on their own.

For most of the reading comprehension events, especially in whole group and small group settings, Nora seemed to have predetermined answers that she wanted students to give, which is somewhat typical of traditional teacher-led discussions (Almasi & Garas-York, 2009). Nora tended to shape or direct the students’ responses to these aims with her questions as seen in this excerpt from her third observation. For this

lesson, Nora's objective was for the children to attend to how the pictures support the story. She chose a very simple text, *My Friend Is Sad* (Willems, 2007), where much of the story is expressed through the pictures, and guided students to construct meaning from the pictures and the text by her use of questions.

- 1 Nora – We've been talking a lot about how readers really understand....But I wanted you to know that the pictures are still important. They're there for a reason. They go along with the story....So I chose a book today that has very few words... We really need to pay attention to what the pictures are telling us. This book is called *My Friend Is Sad* and it's written by Mo Willems. Even looking at the cover, who do you think is sad? Sachin?
- 2 Sachin – The elephant
- 3 Nora – The elephant. How can we tell that the elephant is sad? How do you know from the picture? Johanna?
- 4 Johanna – Because his ears are down and his trunk is down and (inaudible)
- 5 Nora – That body language is really showing us he looks sad. Who do you think his friend is? Emma?
- 6 Emma – The pig
- 7 Nora – The pig and what do you think the pig is feeling? Can you tell his emotion, too, from his body language? Nina?
- 8 Nina – Worried
- 9 Nora – He does look worried. So I think he's worried because his friend is sad. Have you ever felt worried when your friend was sad? (pause) (reading aloud) *My friend is sad.* (to students) Now he looks very worried. (pause as they look at picture) (reading aloud) *My friend is sad.* (pause) *I will make him happy.* (pause) *Yee haw!* (laughter) (to students) ...There's very little words, but what can you tell from the picture? What do you think he's trying to do? Ram?
- 10 Ram – Make him happy again
- 11 Nora – Trying to make his friend happy again. Does it say, "I'm going to make him happy by pretending to be a clown?" Was he writing that?
- 12 All – No
- 13 Nora – Or a cowboy. No, ...you have to read the picture as well.
(AT: N/Obs 3/4-2-08)

The teaching point of attending to the meaning supplied by the pictures is explicitly stated in turn 1. Nora demonstrated her teaching point in turn 9 where she talked about why the pig is worried and encouraged the students to connect this to their own experience. Most of the lesson relied on teacher-directed questions (turns 1, 3, 5, 7, 9,

11) to lead the students to construct meaning, such as, “How can we tell that the elephant is sad? How do you know from the picture?” (turn 3) or “There’s very little words, but what can you tell from the picture? What do you think he’s trying to do?” (turn 9).

Individual students were called on and responded with a few words or a phrase. By using teacher-directed questions, Nora did most of the work to construct the meaning for the students. Nora’s questions tended to lead the students to what she thought was important or meaningful in the pictures and the story. By calling on individual students, Nora limited the engagement to a few students and as a consequence some student had no opportunity to practice the target strategy.

In her small group instruction, Nora also guided student thinking through the use of questions, as shown in this excerpt from her first observation where she is having a small group of four average readers make some predictions before reading *Grandpa’s Slippers* (Watson, 1989). Nora’s pattern of teacher directed questioning was somewhat different and more open-ended when she introduced the students to this text. She used questions to elicit their predictions of what they thought would happen based on the title and cover.

- 1 Nora – So Mike just read us the title of this book. He said, “*Grandpa’s Slippers*.” Look at that picture.
- 2 Alan – They don’t look good.
- 3 Nora – They don’t look like good slippers. Why do you say that, Alan?
- 4 Alan – Because they’re ripped
- 5 Nora – They are kind of ripped, aren’t they? There’s a hole in it, too.
Ripped and holey. So what do you think about these slippers?
- 6 Mike – Maybe he’s going to buy new slippers.
- 7 Nora – It could be time for new slippers.
- 8 Alan – Maybe they’re going to try to get rid of them, but he’s like, no, I want them.
- 9 Nora – Oh, maybe he wants to keep them. Why do you think sometimes people would keep something that’s old like that?
- 10 Mike – So they could remember or something.

- 11 Nora – Maybe these slippers have memories. That could be a possibility. What do you think, Alan?
- 12 Alan – Maybe...he likes them and they're comfortable.
- 13 Nora – Ah, yes, I think you said a favorite word there that maybe they're comfortable. Have you guys ever had a pair of shoes that were your favorite, but then mom said, "No, time to get new ones"?
(AT: N/Obs 1/3-12-08)

Initially, Nora asked Alan why he thought the slippers were not good (turn 3) and encouraged the students to tell what they thought about the slippers (turn 5). Then Nora built on the students' ideas of Grandpa needing new slippers (turns 6, 8) and encouraged them to wonder why Grandpa might want to keep the slippers (turn 9, 11). She also encouraged the students to make a personal connection (turn 13) which they then discussed. In this instance, Nora was using questions to elicit explanations as she guided them to construct meaning. She also prepared her students for what happens in the story by having them connect to a time when someone wanted them to get rid of their favorite pair of shoes by asking, "Have you guys ever had a pair of shoes that were your favorite, but then mom said, 'No, time to get new ones'?" (turn 13) and allowed students to share their personal connections. However, as the children began to read the text and Nora had them stop to talk, her prompts became more teacher directed and shifted the focus away from the students' meaning making from the text to make sure they knew the meaning of the vocabulary words.

Asking questions was the most common approach Nora took in her teaching, which is typical of most comprehension instruction (Duke & Pearson, 2002). Nora tended to use the traditional IRE discourse pattern to direct student thinking to what she thought was important to take from the text. Across all types of instructional events, her questions are often front loaded, or shaped in such a way that students give the answers

she expects. Often these responses are literal, factual, or require minimal construction of meaning and do not take students to a deeper level of comprehension. As a consequence, Nora usually ended up doing most of the work to construct meaning or problem solve unknown words by demonstrating and giving explanations herself with the students having little opportunity for engagement or guided practice in the use of the strategies.

Focusing at the word level. Many of Nora's interactions with students focused their attention at the word level of the text. Focusing on the word level of the text typically involved the students in word work to problem solve a word or brought their attention to vocabulary to make sure they understood the meaning of a word. Across Nora's eight observations, I saw eleven conferences and six of them focused on word work or problem solving with one targeting vocabulary. In the six small group lessons I watched, word work or problem solving was addressed on the average of two or three times per group with vocabulary highlighted an average of five times in each session.

Word work focuses attention at the word level in a text. Word work encompasses decoding by letter sounds or parts, other ways to approach words, such as analogy, and word problem solving strategies (e.g. rereading, using cues from the picture, or skipping the word and reading on). Nora often focused the students' attention on word work in conferences and in small groups, especially to help students problem solve or decode as in this excerpt with two average readers, Lily and Nadia, where Lily was trying to problem solve the word "huge."

- 1 Nora – When you come to a word you're not sure of, what's a strategy that you know that you can use?
- 2 Lily – Stretch out the word
- 3 Nora – It's still not helping, right? So what can you do if stretching out the word isn't working? What's another choice?
- 4 Nadia – Skip it.

- 5 Nora – Oh, did you hear what your partner said? You could skip it. So skip it. [Lily reads and skips the word]...stay right there. So we got to a word we didn't know and we tried to talk it out. We couldn't stretch it out. So we skipped it, right? That was the second strategy. Nadia, do you think you can help her with that word? What do you think it is?
- 6 Nadia – Hug
- 7 Nora – Okay, so let's reread that and see if it makes sense cause we always have to check, does it make sense? *Its jaws were hug*. Does that make sense? Not really...the next sentence says
- 8 Lily – Huge
- 9 Nora – What did you say?
- 10 Lily - Huge
- 11 Nora – Huge, how did you figure that out?
- 12 Lily – Because I think the jaw was big...
- 13 Nadia – My mom says whenever a vowel is before one, before one vowel, it says its own name.
- 14 Nora – ...That's why it's a U instead of u like hug....Does it make sense?
- 15 Nadia – The dogs were huge
- 16 Nora – Does that make sense with the story? Yeah, good job.
(AT: N/Obs 2/3-19-08)

In turns 1 – 5, Nora was using questions, such as “When you come to a word you’re not sure of, what’s a strategy that you know that you can use?” to elicit strategies that Lily and Nadia might use to decode an unfamiliar word. When the strategies they generated (stretch it out, skip it) did not work, Nora asked Nadia what the word might be (turn 5) and Nadia tried “hug” (turn 6). Then instead of the students rereading to check, Nora reread the sentence with the word “hug” (turn 7), which Nadia had suggested. Hearing Nora read the sentence, even with the error, may have helped Lily realize the word was “huge”. Nora did ask the students throughout the conference, “Does it make sense?” But, it is not clear whether Nora, Nadia, or Lily knew what strategy helped them figure out the word. Instead of clearly articulating the rereading strategy, which brought some meaning to the problem solving and seemed to help, Nora asked how Lily figured out the word (turn 11) and concluded the conference by reiterating a phonics rule Nadia talked about (turn 13) that was not actually used to attain the word.

Again, Nora did most of the work and the explaining. The students did not really practice using the word problem solving strategies, except when Lily tried reading and skipping the word (turn 5). The focus of the conference was at the word level of problem solving the word with little attention given to how the word “huge” related to the story or deeper comprehension development of what happened in the story and why.

In contrast to word work, vocabulary work dealt with the meanings of specific words. These words were often ones that the students could read, but Nora wanted to make sure they knew the meaning of. Nora frequently focused students’ attention on vocabulary, especially in small group instruction. It seemed as though she equated understanding the meaning of the words with comprehending the story. Typically, the vocabulary word was explained by Nora or a student and the focus often stayed at the surface level of the word’s meaning. That is, Nora did not usually link the meaning of the word back to the text to show how the word could be used to help the students construct a deeper meaning of the text. For example in this excerpt from the fourth observation, Nora was attempting to demonstrate how readers can determine the meaning of unfamiliar words as she read *Where Are You Going, Manyoni?* (Stock, 1993).

- 1 Nora – Yesterday we started reading *Where Are You Going, Manyoni?* And we were noticing there were lots of words in this book that we weren’t really sure of what they meant because the book...takes place in Africa....We had never heard of them before. So I read aloud the first few pages and when I got to words I didn’t know, I used a few different strategies. And then I asked you, what did I do to figure out tricky parts?...I made a list on the white board...Readers Help Themselves When They Are Stuck on the Meaning of a Word by: ...we talked about using...our schema, our background knowledge ...the pictures...predictions, and the words around the word I didn’t know....We’re going to continue...So when we come to a word that we don’t know, I’m going to ask for your help and we’re going to use some of these strategies to help us figure out the word when we’re stuck. (reading aloud) *Now the sun is high and white. Manyoni’s*

- shadow dances past the mulpani scrub and acacia trees.* (to students)
 Manyoni's shadow dances past the mulpani scrub, mulpani scrub?
 Hmm, what are you thinking? Daniel?
- 2 Daniel – I think it's a fox or something
- 3 Nora – Oh, you think it's a fox or a type of animal? How did you guess that?
 What were you using to help you?...What did you just point to?
- 4 Daniel – The picture
- 5 Nora – The picture, you were using the picture to help you. Nina, what are
 you thinking?
- 6 Nina – A tree
- 7 Nora – Maybe the name of a tree....So we have mulpani scrub and acacia
 trees....What's the words around acacia?...So we're thinking maybe
 these are some kind of trees or plants that's being described. (reading
 aloud) *And over the hot dry plains* (to students) and obviously we're
 not talking about airplanes here. Plains are a type of land, like deserts
 and swamps and plains. (reading aloud) *Machaloni, Manyoni! A
 small voice rings out over the veldt. Machaloni, Tula! Manyoni greets
 her friend. The two little girls hurried down the road together.* (to
 students) Hmm, there's a different kind of greeting. Machaloni. What
 are you thinking that could mean? Jenna?
- 8 Jenna – Good morning or good afternoon.
- 9 Nora – What makes you think that? How did you decide that?...Are you using
 stuff you already know? Did you use the picture? Did you make a
 prediction?
- 10 Jenna – I just guessed
- 11 Nora – You just guessed. Nina, what are you thinking?
- 12 Nina – I think it's like hi.
- 13 Nora – You think it's like hi. How do you know? Why are you thinking that?
 Just making a prediction? (Nora continues reading aloud)
 (AT: N/Obs 4/4-8-08)

Nora seemed to think that by using a book that had words the children would not know would be a clear way to demonstrate her teaching point and on the surface this may appear appropriate. The book she chose had words that were not known to most of the first graders (mulpani, acacia, machaloni) and with the setting of the book in Africa, the words were probably not a part of their background knowledge. Nora seemed to use an open-ended prompt in turn 1, when she asked Daniel, "What are you thinking?", but she had directed his attention to mulpani scrub, which made the prompt more teacher directed. Daniel used the picture and thought that the mulpani scrub was a fox (turns 2,

4). Nora continued and asked Nina (turn 5) and got the response she was looking for, “a tree.” Jenna (turn 8) and Nina (turn 12) seemed to use context to come up with the meaning of machaloni, but that strategy was not articulated by them or by Nora. Nora did ask some students how they came up with their answers (turn 3, 9, 13). Daniel used the picture (turn 4), but had gotten the wrong meaning, and Jenna said she guessed (turn 10). However, by choosing a book that was so far removed from the students’ experience and reading level, the children were not able to use many text strategies to gather the meaning of the unknown words. The vocabulary work stayed on the surface of what the word meant and did not appear to support the construction of meaning from the text because the words were not related back to the meaning of the story

Nora also directed students’ attention to vocabulary in her small group lessons as in this excerpt from her first observation.

- 1 All – (reading) *So nevertheless Grandma bought him a new pair of slippers that day. But Grandpa refused to wear the new slippers. On Tuesday Grandpa was cleaning out the cupboard under the stairs when he came upon his old slippers hidden away in a dark corner.*
- 2 Nora – ...So nevertheless means that he said he didn’t want a new pair, but she still went out any way. So she kind of ignored what he was saying, right?...Nevertheless, Grandma went out and she bought him a new pair anyway. But Grandpa refused to wear them. What does refused mean, refused to wear them?
- 3 Mike – I DON’T WANT TO WEAR THEM!
- 4 Nora – So Mike was acting out maybe how Grandpa was saying it in an angry tone, “I don’t want to wear these!” and refusing them. Nadia?
- 5 Nadia – Maybe he said it sadly, “I don’t want to wear these.”
- 6 Nora – Maybe he was disappointed that she didn’t listen and respect his feelings....On Tuesday, he was cleaning out the cupboard. I heard some of us reading this and it is a compound word, isn’t it? There’s two words put together there, cup and board, but together it’s cupboard. We don’t really say the P, we just say cupboard. So cupboard is like a pantry. A cupboard under the stairs, so it looks like a closet. This actually wasn’t the attic. It was a closet. And there were his old slippers hidden away. Let’s read one more page.
- 7 All – (reading) *“Please leave my slippers alone!” he told Grandma. “Don’t*

- try to hide them.” “They should be hidden,” said Grandma “They’re going to fall to bits. They have holes in their soles and the stitching has come undone.”*
- 8 Nora – Stop for a second...The last sentence there on that page, *They have holes in their soles*, we know what the soles are, what’s the sole of the shoe?
- 9 Mike – Right here [pointing to the bottom of his shoe]
- 10 Nora – The bottom, *and the stitching has come undone*. Flip to the cover. *The stitching has come undone*. Do you see how there’s little strings hanging off?...The stitching is the part of the shoe that’s sewn together and these are a perfect example. [pointing to one of the student’s shoes] May we look at your boots today? Do you see along these edges here and where there looks like threads...that are wrapped around. And here, look, some of his stitching has come undone...So that’s the stitching part, the part of the shoe that’s sewn together....So you see how today we were stopping and thinking about parts of our book after we were reading?...Is it helping you understand the story better?...We’re going to stop here and we’ll see what happens with Grandpa’s Slippers tomorrow. (AT: N/Obs 1/3-12-08)

In this short segment of reading work, Nora focused the students’ attention on five vocabulary words (nevertheless, refused, cupboard, soles, and stitching). While Nora did involve Mike (turn 3) and Nadia (turn 5) in helping her explain what “refused” meant and Mike showed the “sole” of his shoe (turn 9), most of the vocabulary work was done by Nora as she explained the meanings to the group (turns 2, 4, 6, 10). For example, in turn 10, she told the students what “stitching” meant by saying, “Do you see how there’s little strings hanging off?...The stitching is the part of the shoe that’s sewn together and these are a perfect example. [pointing to one of the student’s shoes].” The tension between Grandma and Grandpa, why Grandma kept hiding the slippers, or even relating the vocabulary back to the story was left for the students to make sense of independently.

Even in a conference with a proficient reader, Sam, where there was no decoding or problem solving needed, Nora focused on vocabulary. Sam selected the book *Sunken Treasure* (Gibbons, 1988) when Nora came to confer with him.

- 1 Nora – I'd like to hear you read some of this. Sunken Treasure.
- 2 Sam – (reading) *“It's there! It's really there!” The rotting hull of a ship has been found on the ocean floor. Within the wreck lies a fabulous treasure. The story of each underwater treasure hunt is different, but each goes back to the same beginning...the sinking of a ship. The story of the hunt for the Nuestra Senora de Atocha, a Spanish galleon, begins the same way.*
- 3 Nora – Okay, stop right there. What are you noticing about these words?...
- 4 Sam – It's Spanish...
- 5 Nora - ...What do you think those words mean? They're not English, how do you know what it is?... Do you know what the word galleon means?...
- 6 Sam – A kind of ship
- 7 Nora – A kind of ship. You used what to decide that?
- 8 Sam – The picture
- 9 Nora – So you inferred that from the picture, okay. Keep going
- 10 Sam – (reading) *It is 1622. The Atocha, with its fleet of sister ships, makes its way back from South America to Spain. The Atocha is a treasure ship, laden with gold, jewels, silver bars, and thousands of coins. The fleet makes a stop in Cuba and then sets off again. As the ships near Florida, a hurricane gathers strength. Wind rips at the Atocha's sails. Spray washes across the deck. The 265 people aboard the ship are terrified. Suddenly a huge wave lifts the ship and throws it against a reef.*
- 11 Nora – What do you think a reef is?
- 12 Sam – Like coral reef?
- 13 Nora – How do you know that?
- 14 Sam – Because I saw it before
- 15 Nora – Where did you see it?
- 16 Sam – On TV and in books.
- 17 Nora – Why do you think the people aboard the ship were terrified?
- 18 Sam – Because a storm was coming
- 19 Nora – Why do you think that a storm would make them scared or terrified?
- 20 Sam – Because they thought the ship would break.
- 21 Nora – That would probably be scary, right? Keep going.
(AT: N/Obs 7/4-30-08)

Sam read fluently and Nora chose to focus on the meaning galleon and reef. There were a couple of questions (turn 17, 19) about the text, which also included the word terrified, and Sam explained why the people were terrified. Sam was giving the meaning of the words, but Nora's focus on vocabulary at the surface meaning level makes it hard to know what he understood about how what was happening in the story related to sunken treasure.

Much of the instruction for small groups and conferences focused on the word level to support word work or vocabulary, but was not linked back to show how the words or meanings help to construct understanding of the text being read. Being able to figure out an unknown word or know the meaning of a word does not ensure that a reader will understand the text. For example, at the surface level, a child may be able to sound out the word “clever” and may know it can mean “smart.” In order to take the word to a deeper level, the child needs to understand how clever relates to the story, such as, the squirrel was clever or smart because it hid nuts so it would have food when the winter came and there were no nuts.

In summary, across all the instructional settings in her practice, Nora demonstrated, questioned, and focused on vocabulary, but often stayed on the surface level of reading comprehension. Nora often did most of the work to construct meaning and the student responses seemed limited. The discourse was often teacher directed with students giving the expected answers as they were called on one at a time. There was not much evidence of guided practice with gradual release of responsibility (Duke & Pearson, 2002; Pearson & Gallagher as cited in Pearson, 1985) to engage the students in deeper levels of comprehension and have them practice and take on the new comprehension strategies that Nora was trying to teach.

Nora’s response to the intervention. Nora began her participation in the study as the least experienced teacher in the study who was looking to increase her knowledge of ways to teach reading comprehension. As mentioned previously, during the intervention, she seemed to gain confidence as indicated by her increased participation in the weekly professional development discussions. By the fourth week Nora usually

joined in the talk more than Chuck and, in two sessions, as much or more than Martha, the most active participant.

In the professional development sessions, Nora did seem to be reflecting on her teaching during the intervention as she shared in this exchange in the sixth weekly meeting as we were discussing the difficulty integrating comprehension and decoding skills.

- 1 Chuck – I think it’s...easier to compartmentalize. If you just taught decoding for like four months...your lessons are just there and you don’t have to worry about comprehension, but like you said, you should try to integrate it.
- 2 Linda – ...It’s hard [to integrate] because it’s hard for us to teach that way. It is much easier for us to teach isolated skills, but then the low kids
- 3 Martha – Stay in those isolated skills and they never move out...
- 4 Nora – I think this year after hearing every kid when they come to a word they don’t know and I [say], “Oh, what can you do? What’s a strategy [you can use]?” and every kid’s [says],...”sound it out.”...I feel like next year I’m not even going to talk about that....I’m going to show it in other ways because that’s all they know how to say....they’re repeating strategies. I’m like no, I don’t care if you can tell me, do it.
- 5 Martha – ...I need to say more, “How do you help yourself?”
(AT: CES 6/4-24-08/lines 395-417)

In our last weekly professional development session, it seemed that the intervention had helped Nora reflect on her own teaching practice, as seen here when she talked about conferring.

I also noticed through doing this something that I had been reading taking my reading courses, is that we tend to focus on decoding everything with the lower, little bit lower students and then oh, because this kid can read all the words, “Okay, now let’s talk about the story,” and I realized that I was doing that, too.... When I conference with my higher kids, I’m asking them those deeper questions about the text and “Oh, what do you think the character’s thinking?”...and then when I conference with my lower kids, I’m like, “Oh, what do you think that word is, which strategy did you try to use?”...I really don’t ask a lot of...the comprehension questions. And I think that’s something I want to...focus more on...in the beginning of the year, even when they’re...beginning readers.
(AT: CES 8/5-8-08/lines 15-25)

As shown previously in Nora's teaching, much of her reading comprehension instruction seemed to be at the surface level, but perhaps she was beginning to think about her instructional focus as she noted in the last weekly meeting, "It's not just about the words, it's about all of it [meaning]" (AT: CES 8/5-8-08/lines 24-25). Over the course of the intervention, Nora did attempt to take on some of the concepts we discussed often blending them with her current practice. Applying the read-stop-talk structure and the open-ended prompts seemed to be the most noticeable changes in Nora's practice over the course of the intervention.

Using the read-stop-talk structure. The read-stop-talk structure was mentioned in the first weekly meeting when the study was explained. The purpose of this format is to provide guided practice in the thinking that students should be doing as they read. By reading a page or two and stopping to talk, the teacher can check on whether the student is building a representation of the story and connecting one event to the next as well as probe for explanations, which can lead to a deeper understanding during the reading of the text. Prior to the intervention, Nora admitted that for small group instruction, she typically introduced the story to her students at one session, had them read independently at their seats, and discussed the story at the next small group meeting. Nora's first observation was just a few hours after the first professional development session where I had mentioned the read-stop-talk structure and she immediately began to use the format with her small group that day. But, it was not until her fourth observation that I saw Nora really beginning to apply the concept of exploring student thinking when she stopped the students after a page or two.

Previously in the first two observations, a small group of average readers were reading *Grandpa's Slippers* (Watson, 1989). In the first observation, the students were introduced to the book and as previously shown, Nora used questions to have them predict before they began reading. However, as they continued to read and stop to talk, Nora usually directed them to vocabulary work rather than talk about the text. The same group was observed in the second observation as they continued to read *Grandpa's Slippers* (Watson, 1989). After a quick summary, the pattern of read-stop-talk was used, but again, four of the five times Nora stopped them the talk focused on vocabulary until the group was almost over as seen in this excerpt.

- 1 All – (reading) “Good,” said Grandpa. “That’s how I like them.”
On Sunday morning, Grandpa got out of bed and was about to put on his old slippers when they fell to bits in his hands!
- 2 Mark – Grandma wins.
- 3 Nora – Okay, hang on. I don’t know why we’re starting out, Grandma wins.
So what just happened?
- 4 Nadia – Grandma was right
- 5 Nora – How do you know? What do you mean she was right?...
- 6 Nadia – ...They fell apart.
- 7 Nora – So was Grandma right?...You were all saying, “Grandma won!” What did you mean by that?...Alan?
- 8 Alan – Like he should, (inaudible)
- 9 Nora – Ah, so Grandma won because she was right. They were too worn.
They were falling apart. Mike?
- 10 Mike – She was right that the stitching was getting undone.
- 11 Nora – That’s true. So what does Grandpa have to do now? What’s a choice that he’s going to have to make?
- 12 Mike – Wear the new slippers
- 13 Nora – You think he’s going to have to get the new slippers? Akash, what do you think Grandpa’s going to have to do now?
- 14 Akash – I think he’s going to like burn his slippers.
- 15 Nora – Why is he going to burn them?
- 16 Akash – Because they’re too old.
- 17 Nora – They already just fell apart. Does that make sense?
- 18 Akash – I think he’s going to throw them in the garbage because Grandma bought them
- 19 Nora – That makes a lot more sense than burning them, thank you. Nadia, what do you think?

- 20 Nadia – He said, “You were right all along.”
 21 Nora – Oh, maybe he’s going to make up with Grandma and say, “You know what, I’m so sorry, you were right all along.” That could be. Mark, what do you think?
 22 Mark – Grandpa said, “You’re right.”
 23 Nora – Grandpa said to her, “You were right.” Okay, back to your seats, please. (AT: N/Obs 2/3-19-08)

After the students had finished reading the last page for that day, Nora did discuss the story and asked some open-ended questions, like “What just happened?” (turn 3) and explored student thinking by asking Nadia and Alan to explain what they meant (turns 5, 7). Nora seemed to encourage student thinking when she asked the children what they thought Grandpa would do next (turn 11, 13, 19, 21), but did not affirm Akash’s answer (turn 14–19) until he changed it to be more aligned with what she felt was an acceptable response. Nora seemed to be attempting to use the read-stop-talk structure, but did not focus on student thinking about the text until the end of the group, which is more typical of a traditional discussion to assess comprehension. While Nora was using the intervention structure, she seemed to be using it with her vocabulary emphasis rather than encouraging students to talk about the text during the reading of the story as they could construct meaning as they read as advocated by the intervention.

Nora used the read-stop-talk structure with all the small group lessons I observed and she spoke about her experiences with this format in the fourth weekly meeting.

I know one of the things that we’ve talked about that I’ve been trying to do more is have the kids stop and think when they are reading and also when they tell me something I start to ask them, “Well, where does it say that on the page, point to where it says that.” So I’ve been trying...get them to look a little bit more at the text. (AT: CES 4/4-9-08/lines 25-28)

Some of these changes were observable in the fourth observation. With this group of four average readers who were reading *The Grandma Mix-Up* (McCully, 1991), there

was less of a focus on vocabulary and more discussion in relation to the text. First, Nora guided them through a summary of what they had read the last time they met. Then as the students read, Nora had them stop to talk as seen below.

- 1 All – (reading) *“Rise and shine,” called Grandma Nan. “Nap time is over. We want to be busy now. “What do we want to do?” asked Pip. “Paint us a picture,” said Grandma Nan. “Or act out a story...or do a puzzle....” Grandma Sal was in the living room. “The big game is on TV, she said. “Want to watch? Want a chip?” “I think I will go back upstairs,” said Pip.*
- 2 Nora – ...Let’s stop and think about what’s happening....Grandma Nan wanted to do all these different activities, right? Like act something out, make a puzzle, paint a picture. What does Grandma Sal want to do?
- 3 Mike – Watch the game and have some chips
- 4 Nora – And eat chips, right? So why do you think Pip is going back upstairs? He had two lovely choices. Why do you think he’s going back upstairs? Mark?
- 5 Mark – Because he wanted to, he wanted to do both, but he couldn’t do it.
- 6 Nora – Hmm, how do you think Pip is feeling? Alan?
- 7 Alan – A little mixed up.
- 8 Nora – Mixed up, maybe confused...let’s read on.
- 9 All – (reading) *Pip sat down to write a secret letter. “Dear Mom and Dad, Grandma Nan is too hard, and Grandma Sal is too easy. I want you to come home and do things our way. Love, Pip.”*
- 10 Nora – ...So let’s look at the letter he wrote to Mom and Dad. How did he describe Grandma Nan.
- 11 Mike – Hard, too hard
- 12 Nora – Too hard. What does that mean? She like a rock? When he touches her skin she’s hard?
- 13 Mike – No
- 14 Nora – What does he mean by that? Alan?
- 15 Alan – Maybe...too hard means...wants to do stuff and busy.
- 16 Nora – Hmm, like busy stuff. What are you thinking, Mark?
- 17 Mark – (inaudible) When she does one then she wants to do another.
- 18 Nora – hmm, all right, let’s find the words that Pip uses to describe Grandma Sal. Find the words in the text, in the letter.
- 19 Mike – Too easy
- 20 Nora – Too easy, what does that mean? What do you think that means? Akash?
- 21 Akash – She’s...too nice, she’s too calm. He wants them to be like the middle
- 22 Mike – Like Mom and Dad
- 23 Nora – In the middle. So what do you think Pip is feeling about his parents right now?

- 24 Mike – He wants his parents...
25 Nora – He probably misses them. Let’s see what happens. [students read]
(AT: N/Obs 4/4-8-08)

After reading the first page of the chapter in this session, Nora asked the students what was happening (turn 2), which could show that the students understood the literal events in the text. She scaffolded their construction of deeper meaning by asking why Pip went back up stairs (turn 4) and how Pip felt (turn 6). Nora even took them back to the text when she said, “Let’s find the words that Pip uses to describe Grandma Sal. Find the words in the text, in the letter” in turn 18. While Nora still addressed the meaning of vocabulary (turns 12-21) as she had previously done, this time she made sure the students understood the use of “too hard” and “too easy” within the context of the story. She asked each of the boys what they thought about the meaning of “too hard” and “too easy” (turns 12, 14, 16, 20) and the talk revolved around the characters in the story and how “too hard” meant Grandma Nan always wanted to be busy and “too easy” meant Grandma Sal was too calm. Nora was still directing the discussion, but in this session, there was more student generated talk about the text because when she had the students stop to talk, the focus was on constructing meaning from the text. In the two small group lessons seen in subsequent observations, Nora continued to use the read-stop-talk structure. In each group when she stopped the students to talk, there was a blending of her current practice and the emphasis of the intervention with the focus sometimes on the meaning of the text and at other times on vocabulary.

Using the open-ended prompts. Asking students questions is perhaps the most common form of reading comprehension instruction (Duke & Pearson, 2002) and was a technique that Nora consistently used. Teacher directed questions can guide and assess

students' understanding of the text, but these prompts often provide the context or lead students to the answer the teacher expects. In the weekly professional development meetings, I had suggested using open-ended prompts, such as "What are you thinking?" or "Why?" to give the teacher a window into the students' thought processes as they are reading the text. As we discovered in the transcripts we looked at in some of the weekly sessions, asking more open-ended questions can provide teachers with opportunities to explore student thinking, which sometimes uncovers misconceptions and allows the construction of meaning to be scaffolded.

Nora attempted to use the open-ended prompts that we had talked about in the weekly professional development sessions in her first observation. She asked students "What are you thinking?" twice in the whole group lesson and three times in her small group session. Over the course of her observations she used the prompts consistently in the small group lessons by asking "What are you thinking?" an average of four times and "Why?" an average of three times in each session. In whole group lessons Nora did not use the prompts much in the first two observations or the last two. However, in the four observations the middle of the intervention, she averaged asking, "What are you thinking?" five times during each whole group session, but did not usually ask, "Why?"

While Nora used the prompts in whole group and in small group setting, she did not necessarily apply the questions to explore student thinking in relation to text. She tended to direct her students' thinking to the answers she had in mind as seen in this excerpt from a small group of four average readers who were reading *The Grandma Mix-Up* (McCully, 1991).

- 1 Alan – (reading) "May I go outside," asked Pip. "If you keep clean," said Grandma Nan. "Pip can always take a bath," said Grandma Sal. Both

- grandmas were grumpy.*
- 2 Nora – They were both grumpy. Why do you think both grandmas were grumpy? Mike?
- 3 Mike – Cause...they just both wanted Pip to do one thing
- 4 Nora – And was it the same thing?
- 5 Mike – No
- 6 Nora – No, so neither grandma’s getting...her way right now, so they’re both grumpy grandmas...I think Alan has something important that he wants to share. So let’s listen to his idea. What are you thinking?
- 7 Alan – ...If she wants to eat pizza, she’ll say, “I want to eat pizza.”
- 8 Nora – ...Let’s think about that for a second. If Pip wanted to eat pizza and said, “Okay, I want to eat pizza.” How do you think Grandma Nan who spent all this time preparing a stew might feel?
- 9 Mike – Bad
- 10 Nora – So I think maybe Pip doesn’t want to choose one way over another way because what would happen? What might happen if she chooses one way over another way? Mark?
- 11 Mark – The other grandma might feel bad
- 12 Nora – She might make her other grandma upset. Do you think Pip wants to do that?
- 13 All – No
- 14 Nora – Wow, Pip is in a hard spot. So the next chapter’s called, “Doing Things Pip’s Way.” All right, let’s close our books and think about that, “Doing Things Pip’s Way.” I wonder what’s going to happen? You want to make a prediction?...Anil?
- 15 Anil – Maybe Pip is going to tell her Grandma Nan and her Grandma Sal ...*(inaudible)* and when they’re going to do it.
- 16 Nora – So you think they’ll listen. What do you think, Alan?
- 17 Alan – Maybe...Grandma Sal...or Grandma Nan would be like, “You’re right, we could have this one day and this the other day.
(AT: N/Obs 4/4-8-10)

As can be seen above, Nora tended to use teacher directed questions (turns 2, 4, 8, 10, 12) such as, “Why do you think both grandmas were grumpy?” during the discussion of the text, although she did ask Alan what he was thinking in turn 6. At the end of the session, when she was asking the students to predict what they thought would happen in the next chapter, Nora did use the open-ended prompt, “Where are you thinking?” with each student. It seemed that Nora tended to direct her students’ thinking to the meaning she

had in mind during the reading, but was using the open-ended prompt when having the students make predictions about the next chapter.

As can be seen in this excerpt from the fifth observation, Nora did try to use the open-ended prompts in a whole group lesson even when she had a direction she wanted the discussion to go. In this lesson, Nora was demonstrating how to answer the questions that her students had after she read *How Many Days to America?* (Bunting, 1988).

- 1 Nora – Our next question was, “Why are all the people going to America?” Why were all these people quickly leaving when the soldiers came and they all ran out to a boat? Why do you think they’re coming to America? Now...I’m going to turn the thinking over to you. It may have said it in the text or it may be something you think about things that you know. Why do you think all these people, they were in a bad situation, and they all wanted to come to America? What are you thinking? Nina?
- 2 Nina – Maybe where they were there was a bad king
- 3 Nora – Oh, a bad king, so maybe there’s a bad king....What did you think about what Nina just said, maybe where they were living there was a bad king? What are you thinking about that, Anil?
- 4 Anil – Maybe there’s going to be a war near where they live.
- 5 Nora – Okay, what do you think about what Nina said?
- 6 Anil – I would think the bad king and soldiers (inaudible) fight.
- 7 Nora – Okay, so you’re agreeing with her that maybe there’s a bad king....What are you thinking, Emma?
- 8 Emma – Maybe there’s a bad king
- 9 Nora – ...Sam, what are you thinking?
- 10 Sam – The soldiers are (inaudible)
- 11 Nora – Yikes, what are you thinking, Johanna?
- 12 Johanna – Maybe the soldiers are going to take them away.
- 13 Nora – Well, right now the question was, “Why are all the people going to America?” So some of us started straying from what we were trying to find out....We weren’t trying to figure out what the soldiers were trying to do with people. We were trying to think, “Why do they want to go to America?” So we heard maybe they had a bad ruler there, a bad king. Maybe there was war going on. But, why America? Have you learned anything about what America was like? Way, way, way back? Like before the first Thanksgiving? Why were the pilgrims coming? What do you know about that? About that time in America? Nina?
- 14 Nina – Because there was bad king so they wanted to go away and (inaudible)

- 15 Nora – So again, you're still thinking that where they were from there was bad stuff going on. Well, in America, the reason everybody wanted to keep coming to America was because we had [bad] things here?
- 16 All – No
- 17 Nora – No, so people were thinking...[we] don't like what's going on here, maybe if we go somewhere new and start over, we can start fresh.
(AT: N/Obs 5/4-16-08)

Nora did use the open-ended prompt, "What are you thinking?" with five students (turns 1, 3, 7, 9, 11). The students all focused on Nina's idea of a "bad king" (turns 2, 6, 8) or a fight of some kind (turns 4, 6, 12). Nora seemed to expect a different answer (turn 13) and tried to turn the conversation away from why the people wanted to leave their country to talk about why they would want to go to America. When Nina, in turn 14, continued to talk about the bad king, Nora quickly made her point (turns 15-17) and moved on to the next question. She did not use the open-ended prompt again in that session and continued to shape the direction of the conversation.

In my sixth observation of Nora's practice, she was using the prompts, but continued to use them in a teacher directed way, as she was showing students how to infer answers to the questions they had previously generated when she had read *How Many Days to America?* (Bunting, 1988) the day before.

- 1 Nora – Today, we're going to get to finish all of our questions that we asked ourselves while we were reading *How Many Days to America?*...if you remember I was talking to you about how readers sometimes have to infer meaning when they're reading....We have to use our background knowledge to help us answer....So when a reader's doing that, it's called inferring. They're making reasonable guesses based on things that they know. We're...towards the end of the story and there was a part where they were traveling in the boat and it said that the seas got rough. And somebody asked, "Why was the sea rough?" What are you thinking? What can you infer about the ocean? Why might it be rough?
Lily?
- 2 Lily – Because of the wind
- 3 Nora – The wind. Because of the wind, what kind of effect does the wind have on water?

- 4 Lily – If it's blowing it could make the sea rough
 5 Nora – There you go, that's a great reason, Lily. And you were using, I can tell, your background knowledge, things that you know about the wind and waves. What were you thinking, Alan?
 6 Alan – Like a storm
 7 Nora – When the storm came (inaudible) so it, kind of what Lily's saying, but you're thinking more intense, like a storm and you were thinking more just wind. Okay. They both are possibilities that could make the sea rough. Nina, what are you thinking? Are you thinking the same or different?
 8 Nina – The same (AT: N/Obs 6/4-21-08)

Nora explained her teaching point (turn 1), which was a continuation of the previous day's objective to infer answers to questions. Reading a question that had been generated previously, Nora called on individual students for their ideas (turns 1, 5, 7) often asking, "What are you thinking?" However, she set the stage somewhat by stating the questions the class was to answer as when she said in turn 1, "And somebody asked, "Why was the sea rough?" What are you thinking? What can you infer about the ocean?" (turns 1, 5, 7), which turned the open-ended questions into more teacher directed ones. For example in turn 1, Nora said, "And somebody asked, 'Why was the sea rough?' What are you thinking? What can you infer about the ocean? Why might it be rough? Lily?" Since the objective was to infer the answer to a specific question, the intervention prompt was not really open-ended because it was asked in relation to another question. Nora did ask Lily to expand on her answer and tell what effect wind would have on water (turn 3). Then Nora explained that she thought Lily was using her background knowledge for her explanation. After Alan's response, Nora related his answer to Lily's idea that the wind would make the sea rough (turn 7). Nora was attempting to use the open-ended prompts, however she explained much of the thinking (turn 7) and what strategy Lily used (turns 5) instead of exploring Lily's thinking, which was the intended use of the prompt.

In summary, Nora took on the read-stop-talk structure in her first observation. Initially she seemed to allow for a more open discussion before and after the students read the text, which is somewhat traditional of small group instruction. As the children were reading, she tended to stop and talk about vocabulary rather than explore the student thinking in relation to the text. However, during the intervention she began to have the students talk more about the text as they read, although there was still some vocabulary emphasis. Nora also began to use the open-ended prompts in whole group and small group settings. As seen in the previous excerpts, Nora seemed to use the open-ended prompts when the meaning was more negotiable as seen when she was having students predict what would happen before they read or what might happen in the next chapter, which is somewhat typical of traditional small group instruction. When she used the open-ended questions during the reading or to answer questions that had been generated about the text, it seemed that she wanted to guide the students to what she thought was important and embedded the open-ended prompts in teacher directed ones.

Summary. While Nora began the intervention talking a little less than the others, she seemed to grow in her participation in the weekly meetings and in how she was applying the ideas we had discussed. So, it was surprising, in some ways, for Nora's final interview to have the feel of someone who had studied for an oral exam. She did not hesitate or seem to reflect on some of the ideas of the study, but had her answers ready, perhaps because she felt unsure of her answers in the initial interview. For example, when I asked Nora how she would define comprehension, there was a textbook feel to her answer:

I feel like that's kind of a loaded question because there's a lot of components to comprehension, but basically comprehension is making meaning of language both

written and oral. But I'm finding a lot through my ESL kids that..., besides making meaning, it's also understanding how the words work in the sentence..., English pronunciations, things like that, (AT: N/Int/5-21-08/lines 7-11)

However, Nora seemed more reflective when she talked about changes she might make in her comprehension instruction. As she stated in the last weekly meeting,

I feel like doing it [prompt for more meaning] now, it's really hard because we started already on this from the beginning of the year...strategies, "What do readers do when they get stuck?" you know, this, this, and that. So now to ask those same readers, "Well, what would make sense here? What's happening in the story?" They're like, "What?" So I do think that right from the get go that [meaning] should be my focus. (AT: CES 8/5-8-08/lines 40-44)

This emphasis on meaning was also seen in her final interview when Nora spoke of how the professional development affected her.

I think it's definitely going to have an impact especially of how I start my year.... I was talking with Martha, I think that we really want to sit down and...scaffold a way that we can really get the kids to start talking more to one another and thinking about what they're reading. So I think it's going to change the structure ...of the flow of how I go about teaching reading.
(AT: N/Int/5-21-08/lines 48-52)

A year later, Nora had taken several ideas from the study and used them in her practice. "The study definitely made me more aware of the need to increase student talk. I have tried to use turn and talk more frequently during whole class lessons. I also pushed the importance of accountable talk with reading buddies" (Doc: N/email/5-11-09). She "still use(s) the read, stop, think model but probably not as consistently as I should be. When I have used it, I do notice an increase in the overall comprehension of the text" (Doc: N/email/5-11-09). Nora also noted that she tries to use more high-level thinking when modeling in read alouds and prompts students to explain why in conferences. Over all, she gave positive feedback on how the study impacted her practice, even a year later.

This study definitely made me reflect more on my students' comprehension. Before I would read a book with a group, talk about it, and then meet with them

the next week. After this I started to jot more notes during group discussions and really probe the students to determine if they got what we were reading. I've also scaled back the amount of talking I do in general in an effort to increase the students interactions and involvement. (Doc: N/email/5-11-09)

It seems that the study may have helped Nora become more engaged and focused on her students' learning. She seems more conscious of her reading comprehension instruction and of the importance of talk.

Summary. As reported previously, the professional development intervention had some impact on all three of the treatment teachers' reading comprehension instruction. Martha, Nora, and Chuck all participated to varying degrees in the weekly discussions and all made attempts to use some of the ideas we discussed in their practice.

Using the read-stop-talk structure with small groups was something that everyone tried. This structure involves the students and teacher reading a few pages of text and then pausing to discuss what is occurring in the narrative as a way of exploring and scaffolding student thinking during reading. Before the intervention, Martha, Nora, and Chuck used a similar strategy of introducing books to their small groups and then expecting the students to read independently on their own. At the next small group meeting, the text would be discussed and another book introduced. However, once the read-stop-talk structure was introduced in the intervention, the teachers tended to use this structure with all the small groups I observed in their classroom.

Using open-ended prompts to explore student thinking within the read-stop-talk structure seemed to be more difficult for these three teachers to put into practice. Everyone tried the prompts, but with different levels of understanding. Martha, the most experienced teacher, was able to implement the open-ended prompts some of the time in ways that allowed her to discover what students were thinking. When Nora had students

stop to talk, she tended to focus on vocabulary. She attempted to use the open-ended prompts, but often the questions were teacher directed because they were embedded in talk that directed the students to particular answers rather than exploring student thinking. Chuck implemented two exemplary lessons using the structure and open-ended prompts, but for the most part tended to rely on teacher directed questions in his other observed lessons.

According to the participants, the professional development experience encouraged them to reflect on the importance of focusing on comprehension alongside decoding from the beginning of the school. A year later, all three teachers reported some elements of the study were still influencing their practice. Nora and Chuck reported that they still used the read-stop-talk structure in some of their small groups while all three teachers spoke of using the open-ended prompts to start conversations or explore student thinking. While it seems the intervention was beginning to have an effect on teacher practice, the changes did not always extend to the student level.

Student Data

Most studies of reading comprehension focus on students' acquisition of strategies and skills without considering the relationship between these outcomes and teaching. While this study focused on teacher development and was not an experimental design, I wanted to explore if there had been some impact on student learning. This section addresses the second focal question of the study, "What are the effects of the scaffolded professional development on select students' scores on measures of comprehension prior to and following the intervention?"

The four classes in the study were similar in composition. There were three treatment classes taught by Martha, Nora, and Chuck. The comparison class was taught by Bev and did not receive the treatment. All four classes were given the Gates as a measure for student assessment pre and post-intervention. As can be seen in Table 5, the mean scores among all of the classes prior to and following the intervention were similar.

Table 5

Results of Pre and Post Comprehension Scores on Gates

Name		mean	Standard deviation (sd)	Change in sd
Treatment Classes				
Martha	Pre	26.15	6.67	2.13
	Post	31.3	4.54	
Chuck	Pre	27.37	7.81	0.95
	Post	31.16	6.86	
Nora	Pre	26.39	7.96	2.33
	Post	31.44	5.63	
Comparison Class				
Bev	Pre	27.2	8.81	3.69
	Post	32.1	5.12	

A one-way ANOVA, used to measure the differences between two groups, was run on the pre-intervention comprehension scores and again on the post-intervention scores for all four classes. No significant differences were found. When individual t-tests were performed on each class' pre and post assessments significant gains were found. Thus, regardless of whether the teacher received treatment or not, there was no difference.

One might infer from the comparison of the comprehension scores on the Gates that the intervention potentially had no impact. However, when looking at individual children's learning in one of the treatment classes and the non-treatment class some change was found. In each of these two classes, three children were chosen to represent the range of comprehension ability within the class (one high, one average, and one low

comprehender). I looked at the focal children's comprehension in three ways – the Gates, the QRI-3, and the TOPS.

The comprehension scores for the focal students were taken from the group administration of the Gates' tests. The pre and post-scores on the comprehension section of the Gates for the focal children in the treatment and comparison classes are shown in Table 6.

Table 6

Gates Comprehension Raw Scores for Focal Students

Comprehension Level	Treatment Raw Score (Grade Equivalent)			Comparison (Grade Equivalent)		
	Pre	Post	Difference	Pre	Post	Difference
High	39	39	0	38	36	- 2
Average	24	36	12	31	35	4
Low	18	19	1	13	25	12

Note: Highest possible raw score is 39.

As can be seen, the raw scores for the high students in both the treatment and comparison classes showed minimal change. Similarly, the scores for the average student in the comparison class and the low student in the treatment class had only small changes. Two students, the average treatment student and the low comparison student, did increase their number of correct responses by 12.

An additional measure that was used as a pre and post- assessment of student reading comprehension was the QRI-3, a qualitative reading inventory. A narrative passage and an expository passage were read individually by, or in one case with, each student before and after the intervention and he/she was asked to retell the passage and

answer questions. The scores for the narrative questions are shown in Table 7 with Table 8 displaying the information from the retellings.

Table 7

Qualitative Reading Inventory-3 Narrative Question Scores for Students

Comprehension Level	Treatment			Comparison		
	Pre	Post	Difference	Pre	Post	Difference
High	5/6	5/6	0	5/6	4/6	-1
Average	4/6	4/6	0	5.5/6	5.5/6	0
Low	6/6	5/6	-1	5/6	6/6	1

As seen in Table 7, the students in both the treatment and comparison classes were able to answer direct explicit and implicit questions about the two narrative passages (pre and post) with little change in their ability to recall and infer information based on the text they read. However, in the retellings of the narrative passages as displayed in Table 8, three students (both high comprehenders and the average comprehender in the comparison class) increased the number of turns or details they included in their retellings.

Table 8

Qualitative Reading Inventory-3 Narrative Retell Scores for Students

Comprehension Level	Treatment			Comparison		
	Pre	Post	Difference	Pre	Post	Difference
High	8/20	11/20	3	6/20	10/20	4
Average	8/20	9/20	1	7/20	11/20	4
Low	3/20	3/20	0	10/20	11/20	1

While encouraging students to talk more was emphasized in the intervention, retelling was not. However, retelling is a common qualitative assessment tool and is used as an assessment measure in the school. To score the retellings, I identified the number of turns or occurrences in the story. Then I counted the number of these turns that each student used when they retold the story. The final retelling scores for four of the students were similar. The students in the comparison class and the high comprehender in the treatment class all had high post-intervention scores. For the average treatment student, there was only a 2-point difference between her post-intervention score and the high score.

While narrative texts tend to dominate the reading selections in the primary grades, how students deal with expository texts is of interest because it is important to be able to comprehend both narrative and expository texts. So the students were also asked to read an expository selection before and after the intervention, answer questions, and retell as a measure of their comprehension on this type of text. The expository question scores on the QRI-3 are shown in Table 9.

Table 9

Qualitative Reading Expository-3 Expository Question Scores for Students

Comprehension Level	Treatment			Comparison		
	Pre	Post	Difference	Pre	Post	Difference
High	5.5/6	6/6	.5	5/6	4/6	-1
Average	2/6	3/6	1	3.5/6	3.5/6	0
Low	1.5/6	3/6	1.5	4.5/6	4/6	-.5

Similar to the other assessments, minimal change was found. The high comprehenders tended to do well on this task. The average and low comprehender in the treatment class improved slightly when tested after the intervention. Regardless of the class (treatment or comparison), there was minimal change when students were asked to tell what they learned from reading the expository passage (see Table 10).

Table 10

Qualitative Reading Inventory-3 Expository Retell Scores for Students

Comprehension Level	Treatment			Comparison		
	Pre	Post	Difference	Pre	Post	Difference
High	2/14	3/11	1	2/14	3/11	1
Average	2/14	4/11	2	1/14	1/11	0
Low	2/14	1/11	-1	2/14	2/11	0

The final individual measure given to the focal students was the TOPS. The TOPS was used to gain a sense of the students' use of explanation. Table 11 shows explanation use of the focal first graders in this study.

Table 11

Test of Problem Solving-Revised Explanation Responses Given by Students

Comprehension Level	Treatment			Comparison		
	Pre	Post	Difference	Pre	Post	Difference
High	6	5	-1	10	5	-5
Average	8	5	-3	10	11	-1
Low	10	9	-1	17	11	-6

In my previous work with second graders (Griffin, 2005, 2006, 2007), the TOPS has shown an increase in the use of explanation after the interventions, in which I worked with students. However, in this study, all of the students actually decreased in their use of explanation between the pre and post test on this measure.

The lack of improvement of students in the treatment classes on various measures of comprehension is most probably due the fact that the intervention was conducted over a short period of time. With only eight weeks given to the intervention, the teachers were just beginning to use some of the ideas about comprehension instruction that we explored in the intervention. While some ideas were implemented by Nora, Chuck, and Martha, those changes had not been in place long enough to affect student learning. In the next chapter I examine these findings further and what they imply for supporting teachers as they seek to improve their reading comprehension instruction.

Chapter 5

Discussion and Implications

Improving reading comprehension continues to be an educational priority to help children, especially at-risk students, become competent readers (Dewitz & Dewitz, 2003; National Reading Panel, 2000; RAND, 2002; Valencia & Buly, 2004). Researchers have traditionally focused on understanding the struggles students have with reading comprehension and constructing instructional models for teachers to address these issues. Few studies explore the professional development of teachers and reading comprehension instruction. Yet, in order to improve students' reading comprehension, research must be transformed into instruction (RAND, 2002). As teachers are the agents which deliver the instruction, it is paramount that research on improvement in reading comprehension instruction consider teachers and the professional development they need. The purpose of this study was to investigate the responses of three 1st grade teachers to a professional development intervention focused on reading comprehension instruction. In this chapter I examine the findings of this study in relation to the research question and the relevant literature. This chapter concludes with an exploration of the implications of these findings for practice and future research.

The Research Study

This mixed methods study explored three 1st grade teachers' responses and experiences as they participated in a professional development intervention. The study was guided by an overarching research question: What happens when a professional development initiative engages teachers to scaffold students to use more explanations, predictions, and inferences? This question was examined in two ways. One line of

inquiry focused on the teachers and how the professional development impacted their thinking and their reading comprehension instruction. The second line of inquiry sought to examine the effects of the professional development on a small group of students' reading comprehension.

The setting for the study was a public elementary school (kindergarten through third grade) with a population of about 730 students located in a suburban community in central New Jersey. The study was conducted with four 1st grade teachers (3 treatment and 1 comparison). Six focal children (3 treatment and 3 comparison) were also selected in order to examine the impact of the study on student learning.

The professional development intervention consisted of eight, 30-minute weekly sessions held before or after school. The focus of the intervention was on helping teachers support the construction of meaning by exploring student thinking as children read texts. During the weekly meetings, information about reading comprehension was presented and discussed, transcripts of small group instruction were examined, and active engagement in a read aloud was demonstrated. The teachers also shared ideas and concerns from their practice in relation to reading comprehension. Additionally, small reading group demonstrations were given in two of the 3 classrooms.

Data collection consisted of interviews, observations of teachers during the professional development sessions and in their classrooms, and the collection of various documents including lesson plans and weekly reflections. The students in all four classes were given the Gates-MacGinitie Reading Test pre and post-intervention. Assessment data using the QRI-3 and TOPS were collected from the six focal children pre and post the eight week intervention. The data collection sessions took place from late February

through the beginning of May and resulted in approximately 38 hours of audio-taped data.

The transcribed data were analyzed, focusing first on describing the professional development intervention. Data analysis then turned to examining each teacher including his/her beliefs, his/her comprehension practice, his/her participation in the weekly meetings, and his/her response to the professional development. Case studies were then developed. Finally, the student data were examined to see what affect the intervention had on student learning.

Discussion

As the research-base acknowledges, making meaning from written text is complex and this complexity makes it difficult for teachers to fully understand and teach reading comprehension well, especially to children who struggle. As a consequence, professional development to improve reading comprehension instruction is essential. However, the extensive school reform literature (e.g. Fullan, 2007) highlights time and again how difficult it is to change teachers' beliefs and practices. It is assumed that newer forms of professional learning because of their emphasis on teachers testing out ideas in a supportive learning community may be one answer to assisting teachers to apply research proven reading comprehension practices more effectively in their instruction. This study attempted to emulate these newer views of professional learning. It was found that the professional development intervention did have an impact on teacher learning, although, the impact varied by teacher. The teachers' experiences and evaluations of this professional development shed light on the design and implementation of teacher learning communities as a strategy for instructional improvement.

Teacher change. This study found that all of the teachers made some changes to their comprehension instruction over the course of the eight weeks of professional development. Like many other teachers cited in the research literature (Durkin, 1978-1979; Myhill, 2006), prior to the intervention the three participants of this study relied on the traditional classroom discourse pattern (IRE) (Cazden, 2001). Teacher-led questioning dominated the discussions around text in whole group, small group, and student-teacher conferences (Almasi & Garas-York, 2009; Cazden, 2001; Myhill, 2006). The teaching of all three participants tended to represent a “simple view of reading” (Hoffman, 2009) where instruction emphasized building listening comprehension and decoding. While the teachers may have added an emphasis on students making personal connections to the text, the basic tenet that decoding needs to be in place before reading comprehension instruction can be effective resonated in their beliefs and practices. When the teachers did teach reading comprehension strategies, their mode of instruction tended to reduce strategies to a skill level rather than a strategic process as advocated by the current research base (Block & Duffy, 2008; Dorn & Soffos, 2005; Palincsar, 2003).

However, as seen in other studies employing teacher learning groups (Hilden & Pressley, 2007; Klingner et al., 2004; Stahl, 2009), the participants all gained something from the professional learning experience. Whereas prior to the intervention the teachers used IRE, once involved in the professional development each teacher tried turn and talk, where the children respond to one another about their understandings of text, once or twice over the course of the eight weeks. In small group instructional settings, the teachers consistently used the read-stop-talk structure throughout the duration of the intervention. The other concept that was tried by all three teachers in conjunction with

the read-stop-talk structure was the use of open-ended prompts to explore student thinking and the construction of meaning during the reading of text. Given that most of these techniques move the control of talk away from the teacher to children, each of the participants' efforts to employ them in practice signals that they did gain something from participating in this professional development experience.

While every teacher attempted to apply what was explored in the professional development to engage students in thinking about text, there was variation in their implementation of aspects of the intervention. As reported in other studies, these differences seemed to be mediated by experience, knowledge of reading comprehension (Hilden & Pressley, 2007; Klingner et al., 2004; Stahl, 2009), and each individual's participation level in the weekly meetings. As the most experienced teacher, Martha was able to draw upon her experience and knowledge of reading to understand the deeper concepts of exploring student thinking, which were evident in how she used the prompts in the small group structure. In contrast, Nora, as the newest teacher in the group, was still developing her understanding of reading comprehension. For example, when Nora used the prompts, she did not seem to recognize their purpose as she still tended to direct, rather than explore, student thinking by the way she asked questions. Chuck had more experience than Nora, but as he indicated before the intervention, he was looking for a few new teaching tips and did not really want to change. He also seemed the least invested in the intervention, as evidenced by speaking less than the other teachers in the weekly meetings. Chuck did use the open-ended prompts and encouraged explanations with one of his high groups, but his developmental views seemed to override applying the prompts to his average or low-average small groups.

When asked a year after the study about the effects of the professional learning experience on their practice, each of the teachers reported that there were some sustained changes as an outcome of his/her participation in the professional development intervention. Martha and Chuck reported that they continued to use open-ended prompts, while Nora acknowledged that she was trying to increase the amount of student talk by having students turn and talk with partners more often in her whole group lessons and do more modeling of higher level thinking in read alouds.

Professional development. Given that all three teachers made some efforts to try the strategies we were discussing in our weekly meetings and a year later reported continuing to use some of the ideas, it would seem that the professional development model contributed to their learning. While it is not possible to identify exactly which aspects of the design of this professional development model had the most impact, conversations with teachers suggest that the weekly meetings over a two month period and the use of student work were helpful to their learning.

The professional development took place over time, in contrast to the typical one-shot workshop format, which allowed for more involvement, focus, and reflection (Easton, 2008; Fullan, 2007; Guskey, 2002). The weekly professional development meetings provided a place for the teachers to talk, share ideas, and reflect on their practice with each other and with someone who has knowledge and expertise in reading comprehension (Easton, 2008; Fullan, 2007; Lave & Wenger, 1991; Putnam & Borko, 2000; Vygotsky, 1978, 1986, 1987). As Martha stated, “We don’t have enough... [of] just coming together and talking about teaching practices” (AT: CES 8/5-8-08/ lines 241-242). As the professional development required meeting weekly to discuss particular

approaches to reading comprehension instruction, it also seemed to encourage the teachers to focus more on comprehension in their practice. As Nora noted in her final interview, “I think it definitely... held me accountable because I knew I was going to talk about... [comprehension and] what I was doing” (AT: N/Int/5-21-08/ lines 53-54).

As the work students do in reading is often oral, transcripts were used to illustrate teacher prompting and student thinking so the kind of strategies I was emphasizing in the professional development could be reflected on as a group. Discussing the transcripts seemed to be beneficial as Nora explained,

Observing it [demonstration lesson]...was interesting...[but] you don't pick up on everything until you actually see it there in print....You could see their thinking more clearly, you could see your prompting and...that helped me a lot, seeing it on paper. (AT: CES 8/5-8-08/ lines 209-212).

Examining student work links the teaching of comprehension with student learning and, in keeping with other studies of teacher development, seemed to make the professional development more relevant to teachers (Easton, 2008; Little et al., 2003; Wei et al., 2009).

While I found evidence of teacher learning, the professional development seemed to have no impact on student learning in reading comprehension. The lack of evidence in support of student learning is probably due to the brevity of the intervention. The teachers were making some changes to their instruction, but eight weeks is not enough time for the use of new comprehension strategies to really impact student learning.

Student learning may also have been inhibited because the study did not start with who the teachers were and take into account their interests and the needs of their students. Teachers come to any professional development initiative with their own zones of proximal development. They begin with their own understandings of reading

comprehension, have a range of learners in their classrooms, and may need different kinds of support than a generic one size fits all professional development offers.

In some ways the professional development design was linked to what has been done in other studies in that the study took place over time and involved the teachers in talk about their practice and new ideas. However, as the facilitator and researcher, I was in control of the study, which worked against the idea of focusing on the teacher as learner and instead, focused on the intervention. Even though my initial goal was to collaborate with teachers to improve reading comprehension, I planned the topics for each weekly meeting, almost like mini-workshop presentations, and because I changed the topics in response to what I perceived were teachers' needs, the teachers had little voice in the direction of the study.

The tension I experienced between my goal to collaborate with the teachers and my need to control the intervention has been called the agenda-setting dilemma (Richardson as cited in Putnam & Borko, 2000) because "the staff developer wants to see teachers' practice change in particular directions while empowering the teachers themselves to be meaningfully involved in determining the changes" (Putnam & Borko, 2000, p. 9). I also felt this tension in the weekly discussions as I tried to balance presenting information with letting the teachers' voices be heard. As a consequence, the professional development might have had more impact had it been a more collaborative, inquiry-based initiative as described by educational reform advocates (Cochran-Smith & Lytle, 1999; Easton, 2008; Fullan, 2007; Richardson, 2001; Wei et al., 2009). The lack of teacher input may have inhibited their buy-in, at least initially, and may have hindered change.

In summary, the teachers' reading comprehension instruction was influenced by this professional learning experience. Teacher change seemed to be mediated by experience, knowledge of reading comprehension, and the design of the professional learning, although the design may also have impeded how much change took place.

Implications for Practice

The findings of this study illustrate that a professional development experience based on adult learning principles and designed to help teachers examine their reading comprehension practice can improve instruction. However, at the same time, this study suggests that the impact of the professional learning intervention was affected by elements of the design. There seem to be three design aspects that others trying to do this type of professional development work in their own contexts should consider. The first of these elements is thinking carefully what it means to partner with teachers, the second is considering time both as a tool for designing the professional learning intervention and as a resource for change, and the third is the role of the facilitator in supporting teacher learning.

Partnering with teachers. Changing teachers' beliefs and changing their practice are intertwined (Fullan, 2007; Guskey, 2002). Therefore, it is argued that newer models of professional learning should begin with the teachers and what they believe. Doing this would make it possible to address misconceptions and ensure that the professional development is responsive to who teachers are and what they bring to the initiative. However, one of the problems encountered in creating this professional development intervention was that the study was based on my interests in reading comprehension. While the study did not dictate which of the ideas the teachers were to

implement in their classrooms, the intervention presented the concepts I felt were important and did not really differentiate according to the specific needs of each teacher participant. I asked the teachers about reading comprehension in the interviews and some of their beliefs surfaced during the weekly discussions and in the classroom observations, but I did not really explore their understandings of comprehension or their struggles in teaching meaning making to students in the weekly sessions, which might have produced a richer conversation and brought some of the teachers' needs to light.

Just as we are expecting teachers to be responsive, reflective practitioners in relation to students, the facilitators and researchers of the professional development initiatives must also be responsive to teacher learning to establish a learning community of practice. Before beginning any professional development initiative, the facilitator should determine each teacher's beliefs (Fullan, 2007; Guskey, 2000) and knowledge base (Duffy, 2004; Shulman, 1987) of reading comprehension so that this information can help guide the professional learning in the direction that is needed and help the facilitator to link new learning to existing understandings. Getting to know teachers in this way can also point out the need for additional support during the professional learning, such as demonstration or coaching (Casey, 2006; Lyons & Pinnell, 2001). To ascertain who teachers are, there are many strategies that can be used including informal conversations, participation in group sessions, and observations of practice (Casey, 2006; Lyons & Pinnell, 2001). Taking time to learn about who teachers are, how they practice, and the classrooms in which they teach will ensure that the professional learning relevant to them and their teaching (Casey, 2006; Lyons & Pinnell, 2001).

Considering time. Change takes time (Cochran-Smith & Lytle, 1999; Fullan, 2007; Guskey, 2002). The intervention described in this study was brief, occurring over the course of only eight weeks, which probably limited the amount of change that took place. Therefore, in planning any professional development experiences that bring teachers together to reflect on practice consideration must be given to the duration of the intervention. Time gives teachers the opportunity to discuss, try out, reflect, and revise their learning (Cochran-Smith & Lytle, 1999; Guskey, 2002; Wei et al., 2009). Studies focused on teachers and reading instruction, which extended over the course of the entire school year, found that time helped to mediate change in teachers' reading comprehension instruction (Hilden & Pressley, 2007; Stahl, 2009). Had this professional learning initiative been longer, more change might have occurred.

In addition to duration, the intensity of the professional learning design must also be considered. That is, how often and how long should the teacher learning groups meet for? When the discussion sessions are close together, as in this study, there may not enough time for participants to try things out before coming back to the group to talk. Conversely, if the sessions are too far apart, the focus may be lost. Similarly, the length of the group discussion sessions need to be long enough to present information and have time to talk while bearing in mind the teachers' commitment of time.

In addition to time as a resource to support teacher change, the facilitator needs time. As the facilitator in this study, I found it difficult to gather and reflect on data from discussions in the learning group, observations of teachers' practice, and informal conversations in time for the next weekly meeting. Therefore, more time between the professional development sessions would have allowed the data to be used to guide the

teacher learning (Casey, 2006; Lyons & Pinnell, 2001). In short, change takes time and finding the right balance of time is necessary to optimize the use of professional development to support teacher growth.

The role of the facilitator. While partnering with teachers and time must be considered, the role of the facilitator to support teacher learning cannot be underestimated in the design of any professional development intervention. Whether the leader of the teacher learning group is an outside expert coming in to an unknown building or a colleague who is now taking on the role of a facilitator, she/he will need to build relationships with the teachers as a group and as individuals as well as observe and support change in the teachers' practice.

Facilitating understanding. The responsibility of the leader of the learning group is to facilitate change in teachers' thinking, beliefs, and practices in contrast to one-shot workshops that just impart information and this role is filled with challenges. In this study, I sought to be collaborative, but found myself too often imparting information rather than engaging teachers in the process of thinking through reading comprehension issues. In hindsight, there are several changes I would make as to how I led the professional learning initiative in conjunction with the aforementioned elements of partnering with teachers and considering time.

First, as previously mentioned, the leader of the teacher learning group should attempt to understand each teacher's beliefs and practices. However, the facilitator must also monitor the interactions within the learning group to build a collaborative learning community so that all teachers feel they are heard and respected by the leader and by each other (Lyons & Pinnell, 2001; Mills, 2001). The leader may need to elicit ideas

from less active participants or meet one on one with them to ensure their voices and ideas are heard and provide balance if one member seems to overpower others. Dealing with the range of personalities, teaching experience, and knowledge of reading comprehension represented in any one group is challenging. Understanding these differences and capitalizing on them to support change in teacher learning is one of the challenges for the facilitator.

Engaging teachers in the process is essential. Even if there is a particular focus or topic of inquiry, starting by asking teachers what they think before providing too much information can encourage teacher engagement and may provide additional solutions to the problem. Exploring teachers' thinking might also extend and challenge their beliefs, as well as provide opportunities to address misconceptions or present current educational theories and ideas. However, the facilitator must truly value the teachers' ideas and allow their comments to help guide the learning. Ignoring teachers' thoughts and providing information that takes the discussion in a totally different direction can devalue teachers' input and possibly disengage teachers from truly participating in the professional learning and thus undermine the change process.

In addition, teachers' engagement must also be extended to their practice. Teachers must try out ideas in their classroom and reflect on them. Linking these attempts to student outcomes or student responses can also strengthen the learning potential as teachers examine the impact of their teaching on student learning (Easton, 2008; Guskey, 2002; Little, Gearhart, Curry, & Kafka, 2003). For example, at one meeting, the professional learning group might choose a problem or technique to focus on, which the teachers would try out in their classroom. A few weeks later at the next

meeting, the group can discuss the pros and cons they encountered and refine the idea as they examine their experiences and students' responses. The revised technique can then be implemented in their classes. In this way, the teachers are actively involved in the recursive process of trying and refining ideas with their students' learning in mind.

Observing and supporting practice. The professional development group is a place for discussing and reflecting on ideas about how the techniques are working in practice and affecting student learning. However, observation of teachers' practice is also necessary to ensure that the intervention is impacting instruction.

Before observing, the facilitator will have to come to terms with his or her own biases in order to separate evaluation of practice from observing change (Grieshaber, 2001). Looking at teachers' practice is about supporting their learning. Some observations will be needed to gather data about how teachers currently teach and about changes they are making in their practice. To look for evidence of change, the facilitator can watch for if and how concepts explored in the teacher learning group are being applied. For example, after analyzing the data in this study, I would be looking for how teachers support students' construction of meaning. Do the teachers explore student thinking using open-ended prompts? Do they ask the students to explain their thinking? Are students asked to predict, infer, and explain what has happened in the text? Is there evidence of scaffolding or gradual release of responsibility over time?

By paying attention to teachers' practice, the facilitator can notice when ideas are being misunderstood or misapplied. Issues or problems that arise as teachers are implementing the concepts can be addressed with individual feedback or if several teachers need to examine a concept, the topic can be brought back to the learning group

for reflection. For example, had I structured the professional development initiative so I had time to reflect on the data during the intervention, I would have been able to identify difficulties the teachers had with implementation. The issue of understanding the difference between open-ended and teacher-directed prompts, which was where there was the most variation in implementation between the teachers, could have been discussed and examined in transcripts. In this way, the professional learning group would have developed a better understanding of using open-ended prompts.

The need for coaching support, demonstrations, or one-on-one conferencing with specific teachers can also arise from observations of practice and provide opportunities to differentiate the professional learning for individual teachers. In the design for this study, the observations were planned to observe change in practice and not to support change. A better design would have planned time for observation of practice, time for reflection on data from the observations and professional learning meetings, and time to coach, demonstrate, and confer with teachers to teacher learning in more effective ways.

Implications for Future Research

Improving student reading comprehension through professional development is an important, yet complex issue (RAND, 2002). The subject is complicated because teaching and comprehending are both complex processes and research in reading comprehension tends to focus on students' learning and not on how to improve instruction through professional development. This study attempted to link what happens in a professional development initiative focused on reading comprehension instruction with the responses of the teachers and their instructional practices. Additionally, the study also tried to assess the impact of the professional development intervention and

teachers' response to it on student learning. However, the study was limited by sample size, setting, and length of the intervention. Addressing these limitations could be done in several ways.

First, this study attempted to examine connections between professional development, teacher learning, and student learning. While there was evidence of teacher learning, the impact of the professional development on student learning was not yet apparent, due in part to the limited number of focal students and the length of the intervention. These limitations made it difficult to observe any substantial change in the interaction between the teachers and the students. More carefully designed quasi-experimental studies are needed, therefore, that explore the relationship between professional development, teacher learning, reading comprehension instruction, and student learning. This line of inquiry will ensure a more accurate understanding of how change occurs.

This study is also limited by its setting. Situated in one school in a fairly affluent area, the findings on improving reading comprehension instruction cannot be generalized to other populations. Larger or multi-site studies are needed that include a diversity among participants and sites, to begin to understand which aspects of professional development designs are necessary for any site and any group of participants to impact change in reading comprehension instruction and which components of professional development design need to be more context specific.

A third limitation of this study was the intensity and duration of the professional development design. With weekly professional development sessions and observations spanning over an eight week period, the study required an intense, yet somewhat brief

commitment from the participants. Future studies are needed to find the right balance of how often to meet as well as how long to focus on one problem of practice to be of optimum assistance to teacher growth and student learning.

By examining the links between professional development design, student learning, and teacher development in a number of settings, it might be possible to design and implement more effective professional learning experiences that lead to improvements in reading comprehension instruction and student learning.

Conclusion

This study documented the complexities and challenges inherent in trying to change teacher practice and improve reading comprehension for young readers. As such, it is one of the few studies available that examines the connections between teachers' responses to and experiences in professional learning groups, what takes place in their literacy instruction, and student learning. However, until we become better at designing professional development programs that address both the complexity of teaching reading comprehension and the challenge of how to transform teachers so they are reflective practitioners, the gap between the research-base and teacher practice will remain. Children, like Matthew, need effective comprehension instruction to learn to become proficient readers and teachers need effective professional development to become proficient at teaching reading comprehension. The two are linked; one is not possible without the other.

The newer models of professional learning have the potential to improve students' reading comprehension by mediating change in teachers' beliefs and practices, not just for those teachers who seek out professional development and are eager to learn, but also

for reluctant participants. As, Chuck, the least invested of the participants concluded about the professional development intervention in his final interview,

It's given me some things to think about...I honestly think that this time I'll actually follow through a little bit. I may not totally change everything, but...comprehension's going to become more of a priority and *now I know why*....So I think it's been a pretty valuable experience, just *because it's helped shape me* a little bit. You know, that's all I can ask for. [emphasis added]
(AT: C/Int/5-14-08/lines 219-225)

Helping teachers like Chuck, to understand why reading comprehension instruction should be a priority illustrates the power of newer models of professional development and the hope they provide for children like Matthew.

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Appendix A

Teacher Interview Guide

1. How would you define comprehension?
2. When do you teach for comprehending?
3. How do you teach for comprehending?
4. What techniques do you use when a student is having difficulty comprehending?
5. What do you find most challenging about teaching comprehension?
6. (Pre-intervention) What do you hope to gain from this professional development experience?

(Post-intervention) Can you reflect on how the professional development impacted you and your teaching?

Appendix B

Follow-Up Email – One Year Later

Hi, all,

I need a little more help with the study.

I know I talked with each of you a couple of months ago, but it would be much better if I could ask each of you to just write out quick answers to a couple of questions that way I know I am representing it correctly.

1. Did the study change anything about the way you engage students with talk? Turn and talk, etc.
2. You all tried, but do you still do the read-stop-talk in small group instruction?
3. Did the study influence the way you prompt in whole group, small group or conferences? Do you use the "What do you think?" and/or "Why?"
4. Did the study influence how you think about comprehension? If so, how?

Thanks so much! You're the best!!

Linda

Appendix C

Codes for Teacher Comments in Weekly Professional Development Sessions

Code	Explanation
TSh Teacher Shift	Comments that indicate teachers are contemplating a change in their practice. For example, teaching comprehension earlier and not just focus on decoding in the beginning of the year.
CTP Current Teaching Practice	Comments where teachers shared their current practice. For example, ways they organize students for partner work.
CC Comprehension Causes	Comments that reflect teacher believes causes of comprehension problems that reside in student and not instruction. For example, lack of parent support.
CI Comprehension Issues	Comments that deal with comprehension and instruction. For example, difficulties with transfer of strategy instruction to students' independent use.

Appendix D

Codes for Moves by Teachers and Responses by Students during Instructional Events

Code	Explanation of code
Bkg	Background information given
Craft	Attention to author's craft
Exp	Student gave explanation
Gp Sig	Teacher had students answer with group signal
HDYK?	Teacher asked "How did you know?"
Illus	Teacher prompted student to look at illustration
Inf	Student made inference
Inf cf	Student inferred character's feelings in one or two words
Lit	Student gave literal response
Misint	Student misinterpreted
Obj	Teacher stated objective
PC	Student made personal connection
PR	Student gave personal response
Pic Walk	Picture walk
Pred	Student made prediction
READ	Students or Teacher read section of text
Reread	Teacher prompted students to reread
St com	Student made comment
St quest	Student asked question
Strategy	Teacher articulated strategy
T conf	Teacher affirmed student's answer
T disaf	Teacher disaffirmed student's answer
T exp	Teacher gave explanation
T Info	Teacher gave information
T Mod	Teacher modeled
T Guide Retell	Teacher guided students to retell
T Guide Sum	Teacher guided students to summarize
T pr vis	Teacher prompted students to visualize
T Sum	Teacher summarized
Text	Teacher referred students back to text
Txt evid	Text evidence given
T/T	Teacher prompted students to turn and talk to partner
V	Teacher directed attention to vocabulary
Wdwk	Teacher guided students in word work/decoding
WDYL?	Teacher asked "What did you learn?"
WDYN?	Teacher asked "What did you notice?"
WDYT?	Teacher asked "What do you think?"
Why?	Teacher asked "Why?"
Y/N	Students respond with yes or no

Appendix E

Codes for Student Responses on Test of Problem Solving – Revised

Code	Explanation
L Literal	Response was a factual description of the picture. For example, the doctor is looking in the child's mouth.
Ex Explanation	Response explained why something happened. For example, the doctor is checking to see if the child is sick.
Elab Elaboration	Response elaborated by giving an example. For example, the doctor is checking to see if the child had strep.

Curriculum Vitae

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Education

Ph. D. October 2010	Rutgers University New Brunswick, NJ
Ed. M. October 1997	Rutgers University New Brunswick, NJ
B. S. May 1975	Southwest Missouri State University Springfield, MO

Employment

September 2001 – present	Reading Recovery Teacher/Literacy Support West Windsor-Plainsboro Board of Education West Windsor, NJ
September 1990 – June 2001	First Grade Teacher, Reading Recovery No. Brunswick Township Board of Education North Brunswick, NJ
September 1986 – May 1990	First and Fourth Grade Teacher New Franklin R-1 Schools New Franklin, MO
August 1982 – May 1985	First and Second Grade Teacher Westwood Community Schools Sloan, IA
October 1979 – May 1980	Sixth Grade Teacher Park Hill Schools Kansas City, MO
September 1976 – May 1979	Third and Third/Fourth Grade Teacher Wellington-Napoleon R-9 Schools Wellington, MO
September 1975 – May 1976	Sixth Grade Teacher Billings R-4 Schools Billings, MO