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# A Teacher Development Process for Comprehension Strategies Instruction

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A TEACHER DEVELOPMENT PROCESS FOR COMPREHENSION STRATEGIES  
INSTRUCTION

by

Caryn D. Zietlow

A DISSERTATION

Presented to the Faculty of the Graduate College at the University of Nebraska

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Under the Supervision of Professor Kathleen M. Wilson

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A TEACHER DEVELOPMENT PROCESS FOR COMPREHENSION STRATEGIES  
INSTRUCTION

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University of Nebraska, 2009

Adviser: Kathleen M. Wilson

This case study examined two rural school teachers' change in instruction and understandings of comprehension strategies and instruction while participating in a teacher development process in reading comprehension strategies instruction. The teachers participated in a five-month teacher development process that included training, teacher discussion groups and videotape reflection. Based on data from a teacher explicitness rating scale and qualitative data from discussion group, training session and exit interview transcriptions, both teachers increased their instructional performance and changed their understandings about comprehension strategies and comprehension strategies instruction.

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## CHAPTER 1

### INTRODUCTION

With current pushes from state and federal agencies to see reading skills for children increase, researchers have spent a great deal of time discovering the elements of reading that can be taught and developed in young people in order for them to be successful readers. Research suggests that along with the knowledge needed to decode words, comprehension is critical to successful reading (Afflerbach, Pearson, & Paris 2008; Durkin, 1979; Dole, Duffy, Roehler, & Pearson 1991; Pressley, Johnson, Symons, McGoldrick, Kurite 1989). Comprehension can be described as understanding text that is read, or the end product of constructing meaning from text (National Institute of Child Health and Human Development, 2000).

Janice, a first grade reader, is reading a nonfiction picture book about tree frogs. As she reads, she thinks about the words and what they mean in this book. After reading the title and at different points in the text, Janice thinks about some things she knows about the frogs by the pond close to her house and wonders why the tree frogs she read about are so brightly colored when the ones in her area are just brownish-green. She thinks about the question a bit further and continues reading to see if the text will have an answer to her question.

In this brief scenario, it is evident that the process of reading and making meaning is active. Janice not only read the words but thought about what she was reading. She made connections using her prior knowledge and experiences between what she read and what she knew to be true, i.e. the frogs near her home. This thinking generated a

discrepancy between what she knew about the color of the frogs and what was read, i.e. the color of the frogs. She tried to make sense of the problem, but decided that reading further might give her the information needed to clarify the discrepancy.

For good readers, the processes, or *skills*, used to help make meaning have become automatic. Like Janice, good readers do not have to consciously think about which strategies will assist them with specific reading problems, they have acquired those skills to proficiency (Afflerbach, Pearson & Paris, 2008; Dole et al., 1991; Pressley, Johnson, et al., 1989). However, for readers that struggle to understand, the skills have not become automatic. The processes, in this case reading processes, that have not been developed to proficiency and still require planning are considered *strategies*. To be able to read and understand effectively and efficiently it is important to develop strategies to the point where they become automatic. Said another way, the strategies must be developed into automatic skills. Because some readers continue to struggle with this automaticity, the teaching of comprehension skills and strategies must continue to be a focus of research.

For something to become automatic, the activity must be practiced repeatedly, correctly and thoughtfully, sometimes with the assistance of others, until it becomes habit (Afflerbach, Pearson & Paris, 2008). The processes of comprehension occur in the mind, making it more difficult to offer guidance, support and practice, because it is not easy to see what the reader is thinking. Even though this is the case, research has suggested that comprehension strategies can be taught, and when taught, can develop better processing systems that increase comprehension (Baumann, 1984; Center, Freeman, Robertson &

Outhred 1999; Gambrell & Jawitz, 1993; McCormick & Levin, 1984; Peters & Levin, 1986; Raphael & Pearson, 1985; Raphael & Wonnacott, 1985; Richgels, McGee, Lomax, Sheard 1987; Whaley, 1981). However, researchers found that teaching comprehension is complex and a time consuming process (Duffy & Roehler, 1989; El-Dinary & Schuder, 1993; Pressley, Goodchild, Fleet, & Zajchowski 1989; Rosenshine & Meister, 1994).

*Comprehension Research – A Historical Accounting*

Up to the early 1980's, teaching reading had centered on the development of individual skills like decoding words and word meanings (Durkin, 1979). Comprehension activities centered on the *assessment* of comprehension through worksheets or activities that involved answering questions about a reading passage (Dole et al., 1991). Those assessment activities checked for comprehension of the story but did not emphasize the *processes* that good readers used to make meaning from the text.

Starting in the mid-1980's, a growing body of research began to show the positive impact that explicit teaching of text comprehension strategies could have on the comprehension of text for readers (Anderson, 1992; Block, 1993; Brown, Pressley, VanMeter & Schuder 1996; Duffy, Roehler, & Rackliffe 1986; El-Dinary & Schuder, 1993; Greenleaf & Schoenbach, 2004; Palincsar & Brown, 1984; Pressley, Johnson, et al., 1989). Examples of the strategies that were found to be effective include summarization (Armbruster, Anderson & Ostertag 1987; Rinehart et al., 1986), visualization (Center et al., 1999; Gambrell & Jawitz, 1993), prior knowledge activation (Anderson, 1981; Schustack & Anderson, 1979), question generation (Rosenshine,

Meister & Chapman, 1996), and question answering (Raphael & Pearson, 1985; Raphael & Wonnacott, 1985).

The National Reading Panel (2000) included comprehension strategies, comprehension strategies instruction and teacher development in the area of comprehension strategies, as critically important to building strong readers. The research suggested that good teaching of strategy use includes the gradual release of responsibility from teacher to student use (Duke & Pearson, 2002; Pearson & Gallagher, 1983).

Teachers demonstrate/model the usage of strategies through explanation. Teachers gradually release the responsibility of strategy usage to students by offering guidance and support while student practice the strategies. With guidance, support and practice, students begin to use the strategies automatically.

Said another way, expert teachers of comprehension strategies explain strategies in ways that students can understand. They model or demonstrate their own usage of strategies so students are able to “see” how strategies are used and applied in reading situations. Expert teachers offer students many opportunities to practice strategy use in the context of real reading situations with guidance and support. As students read text, teachers elicit student verbalization of strategy usage and offer guidance to students as they read and practice the strategies. Expert teachers continue to support their students as they use the strategies independently, carefully monitoring student progress and adjusting instruction as needed to support the continued learning of their students (Duke & Pearson, 2002; National Institute of Child Health and Human Development [NICHD], 2000; Pearson & Gallagher, 1983).

*Difficulties Implementing Comprehension Strategies Instruction*

Even though this substantial body of evidence supports text comprehension instruction, there is still a limited amount of explicit instruction available to students (Dole et al., 1991). Researchers suggest several reasons for the difficulty teachers have in implementing comprehension strategies instruction into their classrooms. First, teachers felt they needed a great deal of support to learn how to implement comprehension strategies instruction into their classroom. The teachers verbalized their need for help in the form of videotapes, live models in the classroom, coaching, conferences with colleagues, and scripted lessons, among other needs (Duffy & Roehler, 1989; El-Dinary & Schuder, 1993; Hilden & Pressley, 2007; Pressley, Goodchild, et al., 1989; Pressley & El-Dinary, 1997; Taylor, Pearson, Peterson, & Rodriguez, 2004).

A second reason for difficulty in implementation deals with several time concerns. First, teaching and developing processes for using strategies to comprehend text takes classroom time and is, therefore, a longitudinal process (Duffy & Roehler, 1989; Pressley & El-Dinary, 1997; Taylor et al., 2004). To fully develop comprehension strategy use, readers must spend a great deal of time learning about strategies and their usage, practicing with teacher guidance and independent practice. The teacher must devote consistent time to this type of instruction if they want their students to be able to comprehend well.

The other time consideration deals with the time it takes for teachers to develop expert skills in teaching students how to use strategic processing systems. In studies of teacher development programs involving comprehension strategy instruction, time was

again a concern for researchers (Anderson, 1992; Brown et al., 1996; El-Dinary & Schuder, 1993; Rosenshine & Meister, 1994). The difficulties concerned the amount of teacher development and practice time that was needed for teachers to feel comfortable enough to implement comprehension strategies instruction into their regular classroom routines. Critical to success was ongoing training and discussion time that was available to teachers during implementation.

In all cases, first year implementers were not as successful using strategies instruction as veteran strategies instruction teachers. Veteran teachers explained that it took at least two years of training to feel comfortable with the approach (El-Dinary & Schuder, 1993). In the case of one teacher, (Brown & Coy-Ogan, 1993), it took three years to internalize the instruction approach and make changes in instruction to enhance student strategy use.

A third difficulty with the implementation of comprehension strategy instruction deals with the ability or willingness of teachers to give up control of the strategies to the students (Pressley & El-Dinary, 1997; Pressley, Johnson, et al., 1989; Taylor et al., 2004). As discussed previously, expert comprehension teachers release responsibility of strategy use (Duke & Pearson, 2002; Pearson & Gallagher, 1983). The teacher begins instruction demonstrating their strategy usage and gradually allows student practice of strategies with teacher guidance, finally giving all responsibility of strategy use to students in order for comprehension to become automatic. This type of instruction involves incorporating supported reading time for students. However, research suggests that many teachers still use worksheet materials and activities that ask for answers that

can be found in the text and little about how comprehension works within the mind (Dole et al., 1991). It is difficult for teachers to change from traditional instructional methods of using worksheets to real reading situations. As one teacher in Duffy's (1993) research said, "I can't have 20 kids all going in different directions. I don't feel like I am doing any kind of guiding them" (p. 115). Teachers do not feel like they are in control of the instruction when students are doing their own reading.

A final difficulty with implementation of comprehension strategy instruction that all of the researchers pointed out, dealt with the knowledge that teachers had about the underlying principles of comprehension as a strategic-processing system (Duffy & Roehler, 1989; Dole et al., 1991; Pressley, Goodchild, et al., 1989). When there was a lack of knowledge about how processing occurs, it was more difficult for teachers to understand the intricacies of teaching comprehension strategies instruction.

Difficulties in comprehension strategy instruction are many. However, it is clear that good instruction will increase comprehension for students that struggle to understand what they read. It is also clear that teachers can be taught how to improve their instruction to increase their students' abilities, but this type of instruction is not being implemented in many classrooms (Dole et al, 1991). We need to continue to search for effective teacher development processes that can be implemented so students can benefit from the best instruction available. Although the body of evidence is growing in the area of teacher development, there continue to be gaps that when filled, can increase the skills of teachers.

### *Gaps in the Research*

There are two gaps to the body of evidence this research project will address. First, there continues to be strong evidence supporting teacher development in the area of comprehension instruction. Although this is the case, there is still little guidance as to specific teacher development processes that can be implemented effectively.

Second, the research on teacher development focusing on comprehension strategies instruction has been limited to mainly large school districts involved in district-wide change projects. Many of the studies involving teacher development programs that had some level of success in implementation of comprehension strategies instruction were part of a large, district-wide project to increase reading achievement (Duffy, 1993; El-Dinary & Schuder, 1993; Pressley et al., 1991; Pressley et al., 1992). The researchers in these studies were able to use research assistants and coaches to assist them in teacher development activities, data gathering and analysis. Although some school districts are able to fund teaching assistants and/or coaches, some are not. The research that involved the addition of staff to be successful limits the amount of generalization that can occur in schools of varying sizes.

### *The Current Study*

We know that good readers use comprehension strategies to comprehend what they read. We know that teachers can teach comprehension strategies explicitly to develop more strategic comprehension processes in readers. We know that training teachers to teach comprehension strategies takes time and a great deal of support for teachers. Most of the research on teacher development in the area of comprehension

strategies instruction focuses on large-scale reform in urban school districts with funding sources and training resources available mostly to districts of considerable size. We know that specific processes of teacher development have not been developed as of yet that can be easily implemented into smaller school districts.

The purpose of this research study is to determine the effect of one teacher development process implemented with teachers as they learn how to teach comprehension explicitly in a rural setting. This research will add detail to the body of evidence that supports the implementation of teacher development in the area of comprehension strategies instruction that has largely been ignored – rural schools. The more information we can gather about how teacher development effects teacher performance in *all* sizes of schools, the more widely the approaches can be implemented.

In the following chapter, I will review the literature on comprehension strategies, comprehension strategies instruction and teacher development processes for comprehension instruction. The review will begin with a definition of text comprehension and include descriptions of text comprehension strategies. I will review studies that support the usefulness of strategy instruction for helping readers comprehend. Next, the review will focus on instructional methods used by teachers, and tested by researchers, to increase readers' comprehension of text. Finally, the chapter will end with the description of research on teacher development programs, focusing on the implementation of strategies instruction.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This review begins with definitions of text comprehension and text comprehension strategies, including examples of strategies that researchers found to be successful in helping readers understand what is read and how self-regulation theory relates to thinking and using reading comprehension strategies. The next section builds upon the definitions set forth in the first section by including teaching methods that have increased the abilities of students to use comprehension strategies.

The final sections of the literature review explain the difficulties inherent in teaching comprehension strategies and how teacher change and teacher development processes impact and assist teachers to overcome some of those difficulties. Because much of the research on teacher change and development in the area of reading comprehension instruction has been conducted mainly in large, urban schools, the concluding sections will explain the limits to the current body of evidence that exists for teacher change and development in rural school settings. The current study's purpose and guiding questions will complete this chapter.

#### *Text Comprehension*

This section of the literature review begins with definitions of text comprehension and text comprehension strategies, followed by a description of five individual strategies that were found to be successful in helping students understand their reading. The strategies are summarization, representational imagery (or visualization), story grammar/structures, prior knowledge activation and question generation.

Although there are many definitions of comprehension that appear in the literature in this review comprehension is defined as, “acquiring meaning from written text through processes that are directed by the coordinated and flexible use of several different kinds of strategies,” (NICHD, 2000, Chapter 4, p. 47). In this definition, text includes a range of material from textbooks, to novels, to technology devices that involve text. The definition also includes the active processes involved in making meaning.

### *Text Comprehension Strategies*

Researchers spent much of the 1970’s, 1980’s, and 1990’s learning about comprehension strategies and how they can be taught to increase comprehension. Strategies are thought of as the conscious, deliberate plans readers use to understand what they are reading (Dole et al., 1991; Duffy, 2003). For example, making predictions about future happenings in the text, generating questions while reading, and developing mental pictures of the story in the mind are strategies that good readers use when constructing meaning. Good readers are flexible with their use of strategies, and their strategy use changes depending on the problems they encounter as they read. In other words, good readers use strategies in a variety of ways to solve different reading problems or situations.

When researchers began studying comprehension, they started by discovering what good readers did as they constructed meaning (Pressley & Afflerbach, 1995). They found that good readers were actively engaged in meaning making through the use of various strategies from the time they began looking for a book until after they had finished reading it. As Harvey and Goudvis (2007) put it, “Meaning doesn’t arrive fully

dressed on a platter. Readers make meaning” (p. 15). Examples of the strategies include, but are not limited to: (a) summarization, (b) prediction, (c) question generation, (d) question answering, (e) making connections, (f) visualization, (g) activating prior knowledge, and (h) inferring.

Once researchers discovered what good readers did to comprehend text, research moved to discovering how instruction of comprehension strategies would impact the comprehension of text. Through this research, it became evident that there are individual strategies that can be taught to increase reading comprehension. Pressley, Johnson, et al. (1989) reviewed the research on teaching comprehension strategies and suggested six strategies with empirical data to support their effectiveness. The National Reading Panel (NICHHD, 2000) also cited these strategies as having a positive impact on comprehension. The strategies from their review were; (a) summarization (b) representational imagery (c) story grammar, (d) question generation, (e) question answering, and (f) prior knowledge activation which includes the use of prediction, inferring and making connections to one’s life. The following information will briefly describe each strategy.

*Summarization.* Fountas and Pinnell (2006) explained that a summary is “a reconstruction of the important information in a text. The reader remembers the text by selecting and sometimes organizing ideas and information” (p. 48). To generate a summary, readers must gather information from the reading and from what they already know about the topic, distinguish what information is critical in the text and then bring it

all together. Summarizing is a strategy good readers use throughout their reading to confirm that they made sense of what they read.

The effects of training students how to generate summaries have been found on a variety of measures. Armbruster and colleagues (1987) taught fifth-grade students how to discern the text structure of problem/solution in expository text and taught them guidelines for writing a summary for problem/solution passages. Compared to a traditionally trained group, the students in the structure-trained group were able to recall 50% more of the ideas in a problem/solution passage. The structure-trained group were also able to include significantly more important facts into their summaries as compared to the traditionally trained students.

In another study, Rinehart and colleagues (1986) instructed sixth-grade teachers in how to teach summarization directly and compared the results of students' performance in note-taking. The researchers demonstrated how to present summarization using the following direct instruction principles: (a) explicit explanation, (b) modeling, (c) practice with feedback, (d) breaking complex skills down, and (e) using scripted lessons. After the training the teachers taught five summarization lessons in five consecutive days for a period of between 45 and 50 minutes per lesson. On the fifth day, the students were asked to write a summary of each section of the chapter they had read as a part of their five day lesson. The students were told to write the summaries as if they were taking notes. The researchers compared the summaries of the students with trained teachers to summaries of students in classrooms where teachers had not participated in the professional development.

Results indicated that the students that had direct instruction on the use of summarization were able to recall significantly more major information in their written summaries compared to non-instructed students. There was no effect found on the amount of minor information that was shared.

In another study, Baumann (1984) used a direct instruction method to teach sixth grade students to find main ideas in expository text and found that the instruction significantly increased students' abilities to recognize explicit and implicit paragraph main ideas, recognize details that support the main idea and compose a paragraph and passage main idea.

*Representational imagery.* Representational imagery, sometimes called visualization, occurs when readers generate mental images of the story as they read the text to help them remember and understand what is read. When students are taught to make their own mental constructions of what is read and/or attend to illustrations in text, they will recall text better (Center et al., 1999; Gambrell & Jawitz, 1993).

Gambrell & Jawitz (1993) studied the effects of four different types of instructions given to fourth graders to induce mental imagery and attend to text illustrations while reading. Students were randomly assigned to four treatment conditions that directed students to (a) use mental imagery and illustrations, (b) use mental imagery only, (c) use text illustrations only, or (d) "read to remember" which was used as the control group. At the conclusion of a brief introduction by the researcher the students were given directions to read two passages and write a story about what they had just

read. Specific directions were given to students depending on their treatment group.

Scored written recalls were used as data.

It was found that students who were asked to induce mental imagery and attend to text illustrations enhanced their ability to recall information about the passage more than other treatment groups. Additionally, the imagery and illustration, the imagery-only, and the illustrations-only were statistically superior to the control group.

*Story grammar/structure.* Story grammar is the structure that authors use to write narrative text. These structures include, but are not limited to, main characters, setting, plot, ending, problem and resolution, cause and effect, sequencing, compare and contrast. Readers that use story grammar are familiar with the patterns that authors use to organize information. When readers are aware of these patterns, they are able to organize information and make predictions about what will happen next based on that knowledge (Richgels et al., 1987; Whaley, 1981).

In a study (Berkowitz, 1986) of sixth-graders, the researcher trained four teachers, using four methods of implementing instructional procedures: (a) map-construction where students created a graphic organizer about the reading, (b) map-study in which students were given completed graphic organizers and were led by their teacher in a discussion of the structure and content of the map, (c) question-answering in which students were asked to write out answers to 20 probes about a passage, and (d) rereading where students were asked to silently read the section twice and review what was read by rehearsing to oneself all they could remember about what they read. Students were

grouped by instructional procedure. The four teachers were taught all four procedures and rotated between classrooms to teach all four procedures for six weeks.

By the end of the study, students that used map-construction scored significantly higher on immediate recall tasks of expository passages than students that used the other study procedures. There were no effects found in favor of the map-study procedure.

*Prior knowledge activation.* Researchers (Anderson, 1981; Schustack & Anderson, 1979) have found that good readers are able to use their prior knowledge to frame and assimilate what is being read. The more prior knowledge one has about a topic, the more likely they are to remember what has been read. Instruction and attention to prior knowledge activation has been proven to increase recall and comprehension. One study of prior knowledge activation for third graders (Beck, Omanson & McKeown 1982) demonstrated that when textbook lessons were revised to include information about key concepts of a fiction story, students were able to recall more about the passage and answer more comprehension questions accurately, than students that were not given that information.

*Question generation.* Question generation occurs when readers pose their own questions before, during and after reading. When readers pose questions, they are actively monitoring their understanding and critically thinking about what they are reading to pose questions of themselves and the reading. In a review of 26 research studies involving experimental and control groups, Rosenshine et al. (1996) found that when students were taught to generate questions they increased their comprehension performance. The effect

size when standardized test scores were used was 0.36 (64<sup>th</sup> percentile). The effect size when experimenter-developed comprehension tests were used was 0.86 (81<sup>st</sup> percentile).

The researchers suggested that the usage of signal words and generic question stems offered the most significant results. Signal words are prompts for helping students generate a question. Some common signal words include: *who, what, where, when, why* and *how*. Generic question stems are also prompts such as: “How are ...and ...alike?” “What is the main idea of ...?” and “What conclusions can you draw about...?”

*Question answering.* Question answering is slightly different than other strategies in that the research dealing with question answering focuses more on teaching students how to answer questions that are given to them from an outside source, i.e. teacher or worksheet, not answering the questions they generate on their own. Research that supports the teaching of question answering focuses mainly on one particular method of instruction, Question, Answer, Relationship, or QAR (Raphael & Pearson, 1985; Raphael & Wonnacott, 1985). In the QAR method, when the student is confronted with a question, they must decide whether the answer will come from the book or from what the reader knows, or a combination of the two. Once that has been decided and the reader knows that the answer will be found in the book, the reader must decide if the answer is Right There or Think and Search. If the answer is Right There, the answer will be in the text itself. If it is a Think and Search question, the answer is in the text, but it might be in several different sentences within the text. If the answer is not in the book, but in the reader’s own mind, the reader must decide if the question is between the Author and You or On My Own. When the question is between the Author and You, the answer is not in

the text, but the reader still needs the information in the text to answer the question. If the question is On My Own, the answer is not solely in the text. The reader must infer the meaning based on their prior knowledge, experience and/or other readings in conjunction with what has been read to come to an answer.

As researchers (Pressley, Johnson, et al., 1989; Palincsar & Brown, 1986) continued to learn more about how readers used strategies, they noticed that, in general, good readers rarely used comprehension strategies individually. Good readers tended to use them in conjunction with other strategies in flexible ways.

#### *Multiple Strategies Instruction*

This section of the review outlines several approaches to teaching comprehension strategies that have been found to be successful. The approaches emphasize explicitly teaching comprehension strategies to assist students as they encounter breakdowns in understanding. It will end with a discussion of the difficulties of teaching reading comprehension strategies explicitly.

Instructional approaches to teaching multiple comprehension strategies together have also been a focus of research (Block, 1993; Brown et al., 1996; Duffy et al., 1987; Palincsar & Brown, 1984; Pressley & Afflerbach, 1995; Rosenshine & Meister, 1994). Researchers began by teaching readers how and when to use several different text comprehension strategies in coordination with each other. Researchers made a point to teach readers how to use them in coordinated, flexible ways because good readers use strategies in that way. Other research (Duffy & Roehler, 1989; Duffy et al., 1986; El-

Dinary & Schuder, 1993; Rosenshine & Meister, 1994) focused on the development of teachers in the processes of teaching students how to use multiple strategies.

Three methods of instruction were proven effective in fostering comprehension when taught by researchers and/or teachers. Those methods were reciprocal teaching (Palincsar & Brown, 1984; Rosenshine & Meister, 1994), direct explanation (Duffy & Roehler, 1989; Duffy et al., 1986), and Transactional Strategy Instruction (TSI), (Anderson, 1992; Brown et al., 1996; Pressley & Afflerbach, 1995). A description of these methods follows.

### *Reciprocal Teaching*

In reciprocal teaching (Palincsar & Brown, 1984; Rosenshine & Meister, 1994), teachers teach four comprehension strategies: summarizing, clarifying, predicting and questioning as a group of strategies readers use to comprehend text. Teachers begin by explaining and modeling the use of the four strategies extensively in combination with each other. Then students practice the use of these strategies in small, student-led groups, with the teachers scaffolding the practice. When scaffolding, teachers support the learner as they practice the new strategies, listening and monitoring their practice, offering suggestions for improvement and gradually releasing support as the student becomes more skilled.

Usually the small group sessions begin with a review of previously read material. After the review, group members read the next section of text, which can be as short as a paragraph. After reading, one student, acting as the teacher, directs a discussion around the four comprehension strategies mentioned previously. For example, after reading a

short section of text the student/teacher might ask this question, “Can someone help me understand what the term biodegradable means in this paragraph?” The small group would hold a discussion about the question for a short period of time. The student/teacher would try to formulate the kinds of questions the teacher might ask on a test. After the discussion aimed at answering the question, the student/teacher would then generate a summary of the reading, ask if there are any points of clarification needed from members of the group, and then discuss their predictions about the next section of text.

While students practice using the strategies, the teacher continues to scaffold the practice. They monitor the group’s discussion, prompting or modeling for the group as needed and offering suggestions at the culmination of the group meeting. They also continually remind students why the strategies are important and how they can help them as readers. Ultimately, the teacher’s goal is to relinquish control of the use of the four strategies to the students and have them transfer the strategy use to all reading they do when appropriate.

In their review of sixteen quantitative reciprocal teaching studies, Rosenshine and Meister (1994), found that when reciprocal teaching was used, comprehension scores were significantly higher than control groups who did not have reciprocal teaching, when both standardized tests scores and experimenter-developed comprehension tests results were analyzed. Palincsar and Brown (1984), found similar results in their work with reciprocal teaching. Before using reciprocal teaching, students were typically achieving 40% accuracy on comprehension questions. After using reciprocal teaching, accuracy scores increased to 70% and 80% by the 15<sup>th</sup> day of using it. When given comprehension

questions in an eight-week follow-up, students showed scores equivalent to the last few days of the implementation of reciprocal teaching, demonstrating the continued benefits of the intervention. With minimal review, students were back to the achievement levels attained during the intervention (Palincsar & Brown, 1984).

### *Direct Explanation*

The Direct Explanation method of instruction focuses on teaching students the reasoning associated with using strategies to help make meaning, rather than performance of isolated skills. Duffy et al. (1987) taught teachers how to teach comprehension strategies explicitly as reasoning and processing strategies using their textbooks. The teachers learned how to: (a) explain strategies as mental processes rather than procedures, (b) explain when and how the strategies are used, and (c) organize a lesson including an introduction, modeling of strategy use, interaction between the students and teacher, and closure. An example of explicitly explaining the process that a teacher goes through to model a prediction follows.

The teacher would first read a section of text out-loud. In this example the story involves a child who spilled paint on the basement floor and did not have permission to use the paint. The teacher might say something like this, “Oh boy. My mind just made a prediction that the boy is going to get into trouble. I am guessing that he might, because I know that when I was a little boy and spilled my mom’s clothes washing soap, I was grounded for two days. When I make a prediction, I use what I know about the story and my personal experiences to

guess at what might happen next. My predictions then make me want to keep reading, so I find out if I am correct.”

The example demonstrates how a teacher might directly explain how to use a strategy and how the strategy helps the reader (i.e. it makes him want to keep reading). The teacher explained, through modeling, the procedure and purpose for using the strategy when they read. The teacher would then go on with the lesson using guided practice saying, “Now that I have demonstrated how I made a prediction, I would like you to make some predictions. I want you to think about what you know in the story and what you know from your personal experiences to make a prediction about the next section of text that I read to you.” At the conclusion of the lesson, the teacher plans time for students to share their predictions, the reasoning behind their predictions and how it helped them understand what was read.

Duffy and his team interviewed five students directly after each of six reading lessons. The students were asked: (a) what the lesson was about, or declarative knowledge, (b) when they would use the information they learned, or situational knowledge, and (c) how to do what they were taught to do, or procedural knowledge. Student awareness was rated based on their answers on a scale of 0 – 4, with 0 being an absence of awareness and 4 exemplary awareness. The highest possible score was 12. Based on ratings of student interview data, Duffy et al. (1987) found that students had significantly higher situational knowledge and procedural knowledge in classrooms where teachers directly explained strategies as mental processes compared to students

where teachers did not. There was no significant difference however for students' declarative knowledge.

The lesson interview results indicated that when students were given explicit instruction about comprehension strategies, they had more procedural knowledge about how and when to use the strategies compared to students that were not given that type of instruction. There was no difference in the declarative knowledge students shared about the strategies.

### *Transactional Strategy Instruction*

The Transactional Strategy Instruction, or TSI, approach includes explicit teacher instruction and modeling of comprehension strategies such as problem-solving and mental processing tasks. In addition, teachers and students are involved in collaboration about text and the strategies that one uses to solve problems.

In this approach, students work in groups with the teacher. Groupings are flexible depending on the needs of the students and the emphasis of the teacher. The groups can range from small groups of students with similar skills and abilities to whole class groups (Pressley et al., 1992). The groups focus their discussion on the text they have read and their personal interpretations of the text. The group is transactional because the members of the group interact with each other and with the text.

The teacher's role is critical to the success of the instructional method. Teachers explain and model effective comprehension strategies and coach students to use strategies on an as-needed basis. As Pressley et al. (1992) stated, "Students have a role in determining the instruction they receive. How they react to the teacher's instruction

shapes the teacher's subsequent responses" (p. 516). The teacher must be mindful and supportive of the strategies being used and be flexible to allow for changes in instruction based on the needs of the students. Ultimately the goal of TSI is for students to learn how to choose and apply strategies on their own while they read.

One particular instructional method that was developed (Schuder, 1993) using the principles of TSI is called Students Achieving Independent Learning or SAIL. The SAIL program was developed by a group of teachers with the purpose of developing readers that were independent and self-regulated meaning-makers. SAIL students are taught to: (a) adjust their reading depending on the purpose for reading, (b) "predict upcoming events, alter expectations as text unfolds, generate questions and interpretations while reading, visualize represented ideas, summarize periodically, and attend selectively to the most important information" (p. 20), and (c) think out loud about their comprehension strategy use as they read.

Research on the SAIL method has demonstrated its effects for student achievement. Brown et al. (1996) found that after using the SAIL approach for less than a year, the SAIL readers applied significantly more strategies during think-aloud tasks than did the non-SAIL readers. Means for the SAIL readers ranged from 5.00 to 8.67 strategies per student as compared to non-SAIL student ranges of 2.00 to 4.83. Additionally, May-June standardized test data indicated that SAIL students outperformed the comparison students on the 40-item comprehension subtest with raw scores means in the SAIL group of 34.20 ( $SD=2.65$ ) and comparison group means of 28.73 ( $SD=3.77$ ).

These results indicate that SAIL students demonstrated more strategy usage and higher comprehension subscores on standardized tests than non-SAIL students.

### *Themes Across the Instructional Approaches*

Although there are differences in these three instructional approaches, there are instructional themes that run through all three. First, in each approach the focus is on directly explaining how each strategy can be useful, when it can be used, when it should not be used, and why the strategy would be more appropriate during certain reading situations. Second, instruction has a clear pattern. The teacher begins by modeling the cognitive steps used to employ the strategy. Most of the time the teacher uses a think-aloud approach. In a think-aloud, the teacher models their reading and the points at which they use a strategy and why. They make their thinking visible for students in order for the students to “see” the mental steps used by the teacher.

Third, the teacher guides the students as they practice using the strategy. In the case of reciprocal teaching, students are given the opportunity to practice the strategies in small, student-led groups. The teacher works with the students to make sure they are using the strategies effectively, while students talk with their group members. In the direct explanation and TSI models, students are given a variety of options for practice with teacher support. The teacher may use whole group reading sessions, where students offer their ideas and experiences in using the strategies. Teachers may use small groups to monitor strategy use more closely. Regardless of the method, teachers gave students time to practice strategy use with support and guidance.

Fourth, the emphasis of instruction was on self-regulation of the multiple strategies rather than just emphasizing one strategy. Zimmerman (2000) defined self-regulation as the “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (p. 14). He explains self-regulation within the context of the social cognitive perspective. In this perspective self-regulation is an interaction of personal, behavioral, and environmental triadic processes (Bandura, 1986). Said in another way, ones’ self-regulation is both influenced by and is influencing a person’s personal factors (i.e. self-efficacy, motivation, doubts, fears, etc...), their behavior, and the environment.

The process of self-regulated learning is active and cyclical based on the feedback received from thoughts, feelings or actions in particular learning situations (Schunk & Zimmerman, 1997; Zimmerman, 2000). A reader may try to use a comprehension strategy while reading a new book, only to stop trying when their confidence diminishes while employing the strategy. In another learning situation a teacher attempts to assist students in an activity using a teaching method that had worked with another group of students, but when tried with a different group of students (i.e. different environment) the strategy fails to work. Future attempts at particular strategies are adjusted based on ever-changing factors of the individual person, the environment and behavior.

To make meaning from text, good readers self-regulate their reading. They monitor their thinking as they read, making adjustments to their thinking processes and the strategies they use depending on problems or questions that arise while reading. The

instruction of the strategies should emphasize this self-regulation if readers are to be able to use them effectively to make meaning while reading.

A final theme running through all of the models of instruction was that after students have begun to use strategies effectively, they are given ample opportunities to try out their newly acquired strategy use in their independent reading. At that point in the instructional routine, teachers monitored strategy use through informal (chats) or formal (checklists, evaluations) means. Once students began to use the strategies, teachers made sure to monitor their usage.

### *Teacher Development and Change*

The themes that emerged in the previous section on multiple strategies instruction give some guidance as to an instructional sequence that could assist teachers as they implement strategies instruction into their classrooms. Researchers, however, have found that learning how to teach strategic comprehension has been a difficult and time-consuming task for many teachers and schools. As the National Reading Panel (NICHD, 2000) stated:

What we must remember is that reading comprehension is extremely complex and that teaching reading comprehension is also extremely complex. The work of the researchers discussed here makes this clear. They have not recommended an “instructional package” that can be prescribed for all students. They have not identified a specific set of instructional procedures that teachers can follow routinely. Indeed, they have found that reading comprehension cannot be routinized (p. 4-125).

Although it is clear that comprehension instruction is needed and complex, we must continue to learn about methods of teacher development that will support and assist teachers as they teach their students to comprehend. What does research say about teacher development specific to comprehension strategies instruction? Not much. The National Reading Panel (NICHHD, 2000) found only four studies (Anderson, 1992, Brown et al., 1996; Duffy et al., 1986, Duffy et al., 1987) that met specific criteria to be included in their chapter on teacher development and comprehension strategies instruction. Only two of those studies (Anderson, 1992; Duffy et al., 1987) specifically discussed teacher development methods and their impact on teacher performance and student achievement. The other two emphasized instructional methods. Only one other study (El-Dinary & Schuder, 1993) was found that specifically studied teacher development processes in comprehension instruction.

This section of the review will take a closer look at those three studies (Anderson, 1992, Duffy et al., 1987; El-Dinary & Schuder, 1993) and will summarize what that information suggests is important to consider when developing and/or implementing teacher development processes for comprehension strategies instruction. Because the research is so limited with such a specific lens, the review will then take a broader look at research in different areas of teacher development and related fields such as full-scale reading reform efforts, teacher development in general and in rural school teacher development, and teacher change. Finally, the review will summarize the current research evidence that situates the current study.

*Teacher Development: Comprehension Strategies Instruction*

*Duffy et al. (1987)*. Duffy and his colleagues (1987) conducted a study with nineteen, third grade teachers in a large, urban school in the Midwest. The researchers set out to determine whether teachers could increase their explanations as a result of the training on direct explanation, and if students would in turn increase their reading achievement. The study began with twenty teachers in an urban school, however, one teacher had to leave the study and one teacher from a suburban school was added to the study. The teachers were randomly assigned to a treatment (treatment A) or treated-control (treatment B) group and all teachers used one of two reading basal series. Treatment A teachers were told they were participating in a study about teacher explanation. Treatment B teachers were told the purpose of the study was to validate findings of the First Grade Study (Anderson, Evertson & Brophy, 1979). Neither of the groups were told about the existence of the other. Trainings were conducted separately.

The teacher development process conducted for treatment A teachers consisted of six, two-hour sessions in September, October, November, January, February and April. The training included the following topics: (a) a description of how to recast prescribed basal text skills as strategies (which is described next), (b) how to explicitly explain strategies, including when it would be used and the mental processes involved in using it, and (c) how to organize a lesson including an introduction, modeling, interaction between teacher and students, and closure. The training activities included collaborative sharing between teachers, specific one-on-one feedback and informal coaching regarding observed lessons and viewing of model lesson videotapes.

Treatment A teachers were taught how to recast the basal text skills using several steps. First, they were taught how to determine the mental processing steps needed to use the strategy. Second, teachers were given specific explanations on how to supplement the basal text's procedural emphasis adding examples of how to model the mental steps involved in the strategy.

Treatment B teacher training consisted of a two-hour group session in September and October on how to use the management principles outlined in the First Grade Study (Anderson et al., 1979). In January, a third session was held to review the management principles. Informal coaching after observations was also provided.

Six classroom observations were conducted throughout the study. Teacher data included ratings based on transcriptions of audio-taped strategy lessons. The transcriptions were rated by six, trained raters using a rating scale developed by Duffy and his colleagues (1986). The rating scale was organized into three parts: (a) the information presented about the strategy, (b) the means used to present the information, and (c) cohesion within and across the lessons.

An analysis of variance (ANOVA) was used to examine the differences in the explanation ratings of treatment A and treatment B teachers. The results indicated that treatment A teachers' explanation ratings were significantly higher than treatment B teachers' beginning with the second observation and continuing through the sixth observation. It was concluded that because of the training, the teachers increased their ability to explicitly explain strategies.

This study was quantitative only and included no other information regarding the teachers' or researchers' evaluation of the teacher development process presented. That type of information would have been helpful to assist other schools in developing trainings for their teachers in strategies instruction. Additionally, this study was conducted in an urban setting with twenty teachers all teaching the same grade level. The findings might be applied to other schools similar in size that have a large number of the same grade level teachers, but it is difficult to see how the results would relate to rural school settings with much fewer teachers per grade level.

*Anderson (1992).* Anderson (1992) studied the effects of a teacher development process in TSI to see if the teachers were able to change their instructional performance, and if the changes in instruction affected student performance. This study was conducted in an urban setting, and included sixteen special education teachers teaching grades ranging from sixth through eleventh grade. Anderson (1992) included nine experimental teachers that received strategy training and peer support, and seven control group teachers that did not receive any assistance. The training emphasized a list of twenty teacher shifts and twelve student shifts representing changes the researcher felt needed to be made for more flexible strategy usage to occur. An example of a shift was to change from a focus on right answers to a focus on how to arrive at an answer. Another example was a shift from teacher to student control of reading strategies.

Three 3-hour training sessions were held at one-month intervals. The training included explicit instruction centered on the list of teacher shifts and the evaluation of three video-taped teaching sessions. Positive instances from the video-tapes were used as

a means to evaluate their teaching in light of the shifts. As teachers accomplished shifts, other shifts were emphasized in the trainings. Teachers also offered their own self-reflection by discussing and selecting shifts they believed were areas with which they could improve. Guidance and support for those changes came from the researcher and/or peer support teachers.

Another component of the training was sharing and discussion of a set of specific principles for fostering active reading during reading group discussion. These principles included specific procedures for modeling strategies and questioning techniques along with other information on teaching strategies. The final component of training was the use of peer support teachers. Seven teachers were trained on using the shifts previous to the study. Throughout the study, the experimental teachers could call upon the peer support teachers for assistance. It is unclear as to how often the experimental teachers called upon the coaches for assistance.

An analysis of pre and post-test videotapes was conducted. Videotaped teaching sessions were rated using a rating scale developed based on the shifts. Two independent raters were trained to use the rating scale. T-test results showed a significant increase in the experimental groups in all areas of the rating scale ( $p = <.01$ , or less), with mean experimental gains from 26 to 80%. The control group showed mean losses over the period of the study of less than 1 to 12%.

Qualitative results of teacher change also indicated an increase in performance. Transcriptions from classroom lessons indicated that teachers increased their performance mostly in the aspects of teaching that are most easily routinized. Examples

cited were asking questions to set reading goals, summarizing while reading, and asking what was learned after reading. At the beginning of the study there was no indication in the transcripts that the teachers asked students to use strategies flexibly or shifted control of the learning from the teacher to the student. By the end of the study, teachers demonstrated more flexible usage of strategies and involved students comments regarding their own thinking more often, demonstrating a shift from teacher to student control of the strategies.

*El-Dinary & Schuder (1993)*. Although not a part of the National Reading Panel report (NICHD, 2000) El-Dinary and Schuder (1993) conducted a study of a teacher development process in a diverse, urban elementary school that had adopted an approach to TSI called SAIL. In review, SAIL's purpose was to develop readers that are independent and self-regulated meaning makers (Brown et al., 1996) using direct explanation and modeling of strategy usage.

El-Dinary and Schuder (1993) gathered qualitative interview and observational data on two cohorts of teachers as they learned to use the SAIL approach in their classrooms. The 1990-1991 cohort included three teachers new to the school district that taught in grades 3, 4, and 6. The 1991-1992 cohort included all four first grade teachers. The school district mandated the usage of the SAIL program. The teacher development processes were slightly different for both cohorts, but the results were summarized across both cohorts.

The teacher development process for the 1990-1991 cohort began with four, half-day (morning) trainings and one classroom observation conducted by the founder of the

SAIL program. The first training, held in mid-September, consisted of a research-based rationale for SAIL, the goals of the program, a description of explicit instruction and the SAIL strategies. The trainer modeled a SAIL lesson with the teachers acting as students. At the conclusion of the first training, the teachers were asked to try SAIL with their students.

In the following training session, held in late September, teachers (a) reflected on their first attempts at using SAIL with their students, (b) participated in a “dos and don’ts” of SAIL activity and humorous “quiz” and (c) were given more detailed instruction by the trainer on individual strategies with ideas for prompts they could use to explain the strategies to students. Two experienced SAIL teachers modeled lessons for the cohort and talked about how to prepare SAIL lessons, and videotaped SAIL lessons were viewed and discussed.

The final training sessions held in December and February consisted of teacher discussion of their experiences with SAIL lessons and more detailed descriptions of SAIL concepts conducted by the trainer.

The teacher development process for the 1991-1992 cohort followed a similar pattern with slight differences. The first training, held in October, included the same information sharing as the first training, i.e. rationale and goals of SAIL and a description of explicit instruction, and was conducted by the two founders of SAIL. Instead of the modeled lesson by the trainers, the teachers watched a video of an experienced SAIL teacher. The next training, held in January, consisted of a review of SAIL components, including the goals, strategies and model; and videotaped SAIL lesson presentation with

discussion. Between the second and third training session, a senior researcher held four lunchtime discussions with teachers who were interested in learning more about SAIL. Most teachers attended.

The final training, held in February, included; (a) discussion of teachers' reactions to SAIL, (b) more detailed description of the strategies by a SAIL founder, (c) a "dos and don'ts" activity, (d) videotape viewing of experienced SAIL teachers with discussion, and (e) sharing of sample bulletin boards and other materials created by veteran SAIL teachers.

The results of the teacher development process varied depending on the teacher. Two of the seven teachers stated they accepted the SAIL approach and *would* continue to use it in their classroom. Two of the seven teachers stated they did *not* accept the SAIL approach and would probably never incorporate it into their classroom. The other teachers fell between the two extremes described.

El-Dinary and Schuder (1993) also reported that most of the teachers made progress in becoming experts at SAIL, but in a year, none were as proficient as experienced SAIL teachers, and none of the teachers felt secure in the approach. The teachers stated two challenges they faced with the teacher development: (a) some were uncomfortable with the lack of prepackaged materials, and (b) teachers were not sure how to coordinate SAIL with other reading instruction or their personal teaching style.

Although the teachers made progress toward becoming experts, it was clear that most of them continued to need more training and support. At the end of their report El-Dinary and Schuder (1993) stated, "It seems to take a great deal more training and

support than were available to these two cohorts of teachers to become proficient with strategies instruction” (p. 216).

These studies demonstrate that through teacher development, teachers can increase their performance in teaching comprehension strategies, although El-Dinary and Schuder (1993) stated that it was difficult and took a great deal of training to make changes in instruction. There were some similarities in development methods that can be noted:

1. In all of the studies the training was conducted and led by a trained person from outside of the district.
2. The trainer conducted several training sessions over a period of time. Two of the studies (Duffy, 1987; El-Dinary & Schuder, 1993) were year long, and one study (Anderson, 1992) was over a three-month period.
3. The availability of coaching was a component of all development programs.
4. Modeling of expert strategy instruction was evident in all programs. Modeling was done by the trainers, by other expert teachers in person and on videotapes.
5. Teacher reflection and discussion was also common throughout the studies. Reflection was based on teacher videotapes (Anderson, 1992), classroom observations (El-Dinary & Schuder, 1993), and in all studies - by teacher report.

Another similarity across all of the studies was that they were all conducted in urban schools that had many teachers at the same grade level, i.e. Duffy (1993) had twenty, third-grade teachers, and Anderson (1992) had sixteen special education teachers. The El-Dinary and Schuder (1993) study was an exception with just four teachers per

grade level. Although the similarities given may offer guidance for large school districts as they work to increase teachers' abilities in comprehension instruction, there was no research found that specifically studied the effects of comprehension strategies teacher development in small schools with only one or two teachers per grade level.

*Teacher Development: Full Scale Reform*

*Taylor et al. (2004)*. In a large-scale reading reform study, Taylor and her colleagues (2004) did include some (three) rural schools in their research. Although it was not specific to just comprehension strategies teacher development, it does offer suggestions for teacher development they found to be effective. This research can add insight into how teacher development can be applied to rural settings, but has more application for large schools.

Thirteen, high-poverty, diverse schools located in five states participated in this study. Seven of the K – 5 schools were urban, three were in towns fewer than 100,000 and three were in rural areas. Seventy-five percent of the staff voted by secret ballot to participate, with two teachers from each building volunteering for classroom observations and interviews. The teacher development process, called the Center for the Improvement of Early Reading Achievement or CIERA School Change Framework, was developed by Taylor and her colleagues (2004) to offer schools procedural knowledge about translating reading research into school and classroom practice. It was an internet-based framework where faculty and participating schools could go to find research and professional development activities to assist them in their school improvement efforts. The emphasis

was on the analysis of school-wide and classroom data to improve the school in general and to improve classroom performance.

Each school chose a leadership team consisting of teachers, the principal, and an external facilitator that spend a minimum of eight hours a week in the school. The leadership team was asked to meet as a whole group, monthly for one hour and then within a study group, three times a month. Whole group meetings focused on school improvement with discussion and action on shared leadership, the school-wide reading program, and parent partnerships. Small, study groups focused on teacher development in the teaching of reading. All teachers were asked to participate in the study group sessions.

The study group teachers examined aspects of classroom reading instruction that was supported by research. They set goals and action plans for what they wanted to learn and implement in their classrooms and decided on a method of tracking their progress. Their learning activities consisted of: (a) discussion on research articles about that topic, (b) watching and discussion of video clips of effective practice, (c) sharing their teaching videotapes for discussion, (d) problem solving, and (e) sharing their own expertise related to their activities and action plans. Data to document the reform effort included study groups meeting notes; and external facilitator (a) monthly, summary logs of activities and (b) end-of- year reports.

Among other results, two sets of data stood out that had implications for the current study. The first data set had to do with the differences the researchers found regarding reform effort across schools that had participated in the Framework for two years. The other data set dealt with comprehension scores. The researchers categorized

the schools as high-, medium-, or low-reform-effort schools. The mean reform-effort score was 3.7 with a standard deviation of 1.9. There were five schools considered High Reform Effort schools, three schools designated as Moderate-Reform-Effort (MRE), and five schools designated as Lower Reform Effort schools. Students in the Higher Reform Effort schools increased their mean scores on Gates-MacGinitie comprehensions NCE scores from year 1 to year 2 (except in grade 2) whereas the mean scores for students in the Lower Reform Effort decreased.

The researchers used a three-level HLM analysis on Gates-MacGinitie comprehension normal curve equivalent (NCE) accounting for 17% of the between school variance ( $ES = .27$ ). For every 1-point increase in reform-effort score, a school's mean NCE score increased by 1.34. At the classroom level, they found that grade ( $ES = .36$ ) and the coding of comprehension skill instruction ( $ES = .27$ ), both negatively related, accounted for 29% of the between teacher variance. For every increase in grade level (e.g., from grade 2 to 3 or 3 to 4), students' mean NCE score decreased by 2.57. For every 10% increase in the coding of comprehension skill practice, a students' mean NCE score decreased by 1.38. Based on classroom observation data, the researchers found that comprehension strategies instruction constituted only 5% ( $SD = 11$ ) of instruction across grades.

These results indicate that even when schools were increasing their knowledge and skills overall, comprehension strategies instruction remained the lowest coded instructional factor across schools. Standardized test results corroborate that finding and demonstrate that over a two-year period the students lost ground in comprehension in the

Lower Reform Effort schools and made only marginal gains in the Higher Reform Effort schools. The authors made this comment about these findings, “A logical explanation is that high amounts of mechanistic practice on comprehension skills are taking time away from other important comprehension activities such as higher level talk about text and use of comprehension strategies during reading” (Taylor et al., 2004, p. 57).

Teacher development data (i.e. interview and field notes) suggested that the teachers in the Higher Reform Effort schools had more positive comments about their teacher development and continued with study group and research topics more consistently than teachers in the Lower Reform Effort schools. Researchers also noted that even though the Higher Reform Effort schools were more consistent with their study group topics, they had low ratings for teacher development, 1.9 (SD = 0.2) and reflection on practice, 1.9 (SD = 0.3) on a scale ranging from 0 to 3.

Overall, these results suggest that the schools with high Higher Reform Effort were making an effort to improve their school and classroom performance and were showing progress in that regard. The results the researchers were most puzzled by were the comprehension results. The results indicated that neither the Higher Reform Effort nor the Lower Reform Effort schools demonstrated an increase in comprehension strategies instruction.

Once the researchers had identified the Higher Reform Effort schools, they chose one of those schools to provide more detail as to their process throughout the study. This particular school was in a large urban area. Based on their data, the teachers decided to use their study group time to increase their teaching abilities in the area of comprehension

instruction. Based on facilitator log entries and study group meeting notes, over half of the first year was spent on learning how to be more productive as a study group. The rest of the year was spent on the following topics: guided reading, reading comprehension, reading assessment, reading interventions within the classroom, higher level questioning, and refining coaching and modeling abilities.

During the second year of implementation the study groups focused more on specific instructional techniques to improve reading comprehension. The first part of the year was spent learning how to teach thinking maps to summarize what was read. The last part of the year was spent in separate groups studying different comprehension topics such as the Directed Reading – Thinking Activity by Blachowicz and Ogle (2001) and SAIL (Brown et al., 1996).

The results of these study groups indicated that all of the teachers made changes in their teaching practices in the directions suggested by research. Three out of the five were observed doing more high-level questioning, two of the five increased their focus on comprehension strategies instruction, two of the five increased their use of coaching, and four of the five engaged students in more active responding in year two as compared to year one.

Based on interviews of 12 teachers in this selected building, 12 of 12 teachers commented positively about the study group process keying in on the opportunity for reflection, consistency in instruction and the value of learning from each other. Seven of the twelve teachers interviewed mentioned the usefulness of observational data to help

improve their instruction and many teachers consistently commented on the value of having the literary assistant from the CIERA Project.

Overall, the results of this study are similar to some of the common themes that were mentioned in the previous section on comprehension teacher development. So far, it is clear that teachers can increase their performance as strategies teachers with teacher development. An outside trainer or consultant that assists in the teacher development programming, as well as teacher reflection, have been common threads throughout. Knowledge of instructional techniques and research has been developed in a variety of ways throughout the studies. The most common were: (a) trainer expertise through training sessions and modeling, (b) videotape viewing of both expert teachers and participant teachers, (c) reflection and discussion around instructional topics, (d) reading of research articles, and (e) observation and coaching by a trainer.

All of the studies to this point in the area of reading teacher development, with the exception of a few schools in the Taylor et al. (2004) study, have been conducted in urban schools. What does research say about teacher development in rural settings? There are very few studies of teacher development processes that have been developed and researched in rural settings. The following section will highlight a few of the studies that were found.

#### *Teacher Development: Rural Schools*

To demonstrate the limited amount of research that has been conducted in rural schools on any topic, Arnold, Newman, Gaddy and Dean (2005) reviewed the ERIC and PsycINFO databases searching for K-12 rural education research studies published

between 1991 and the summer of 2003. They set out to find rural education research literature and determine the quality of the research. They found only 21% of the studies in the database met their requirements of using a comparative research design to investigate a rural education problem. Of the 106 articles that used some kind of comparative research design, only ten were rated as higher-quality research based on a scale by McREL. Forty-eight were considered medium quality and forty-eight were considered lower quality. Again, these were studies of any kind related to rural schools.

It was difficult to find more recent studies in the area of teacher development conducted in rural settings. Arnold et al. (2005) published a summary of topics that had been researched in the area of rural education between the years of 1991 and 2003, including only comparative research designs and quasi-experimental. No truly experimental studies were found. Based on their criteria, two studies (Allinder & Beckbest, 1995; Devlin-Scherer, Devlin-Scherer, Wright, Roger & Meyers 1997) were cited in the Arnold et al. (2005) summary as being of medium or high quality pertaining to teacher development. Those studies are described next.

*Duffy (1993)*. The first study discussed is not a study of a teacher development process per se, but a continuum of progress that Duffy (1993) developed as a result of a four-year staff development project with eight rural school districts. While working with teachers to develop their skills as comprehension strategies teachers, Duffy (1993) gathered qualitative data from teacher interviews and the direct observation of instruction. He found consistencies in the progress teachers made and created what he called nine points of progress. He cautioned that the continuum did not represent

developmental stages, but recursive and nonlinear progress affected by many complexities. The nine points are: 1) confusion & rejection; 2) teacher controls the strategies; 3) trying out; 4) modeling process into content; 5) the wall; 6) over the hump; 7) I don't quite get it yet; 8) creative-inventive; and 9) -unnamed.

As his analysis began, he noticed that the teachers at point one were hesitant to try methods that were not a part of their basal program. They did not feel they had the ability and/or teaching skills to be effective without the use of the basal. As they progressed to point two (teacher controls the strategies), they began to use strategies with the stories in their basal readers. At this point two teachers focused on correct answers and not on how students were thinking. At point three, or trying out, the teachers began to show an interest in the strategies, looking for lists and information about strategies. They worked hard to teach strategies explicitly. Usually teachers taught strategies as independent entities and typically used worksheets for practice. Students generally remembered the strategies, but could seldom describe their function or usefulness when taught this way.

When teachers reached point four, they saw the importance of putting students in control of the strategies. They taught strategies just before students read, relating the strategies to the text. At point four teachers modeled their thinking. Teachers were concerned about teaching the correct strategies and were worried about not teaching them in the correct order.

Point five, or the wall, is pivotal. This position on the continuum had teachers moving in different directions. Overall, the teachers had moved away from basal-directed teaching and began to model strategic thinking. They saw that in order for students to

genuinely use the strategies, they had to figure out how to teach the strategies in meaningful ways. Some teachers felt that this type of instruction was not possible within their current classroom schedule and routine, while others worried about the loss of control they would have if they allowed students to use real reading to learn about strategies. Some teachers moved beyond the wall to Point six, the hump. At this point, teachers learned that strategy instruction is more than teaching individual strategies. The instruction needs to be authentic and based on real reading situations, thus there is no one method, but a variety of methods to teach how to use strategies.

At point seven, or I don't quite get it yet, teachers clung to some of their old understandings of strategies, yet taught them in sophisticated ways. The teachers needed reassurance that when they taught the strategies in authentic situations, it was okay. Some teachers matured in their views and moved to point eight, or creative-inventive. At this point, there was little that confused teachers about the strategies. When unexpected situations arose, they were able to revise strategies or invented new ones to fit the specific situation. At this point, they understood the importance of strategies and were not concerned about teaching the right ones or a specific list of strategies. Their emphasis was on using strategies for authentic purposes.

The final point was left unnamed. Duffy believed that the teachers at point eight would continue to learn more about strategies and strategies instruction thus the need for another point.

*Allinder and Beckbest (1995).* Allinder and Beckbest (1995) studied the effects of two teacher development activities (i.e., the use of a consultant and self-monitoring) on

student achievement in math computation and teacher ability to change instruction to meet the needs of individual students. Eighteen special education teachers from two Educational Service Unit areas were trained in how to use Curriculum Based Measures, or CBMs, to increase student performance. This training included learning how to use software specifically designed to monitor student progress on their CBMs and set individual goals for students based on their data results.

After the initial training, the 18 teachers were divided into two equal groups and given different follow-up training procedures. One group met with a University-based consultant bimonthly at the school. The teachers were given the opportunity to ask the consultant questions about using CBMs to guide instruction, were offered feedback on the decisions they had already made regarding instruction and were offered other technical assistance. The other group of teachers was given self-monitoring questionnaires that were to be filled out every two weeks. The questionnaires included reflective questions about using the CBMs to change instruction and had University staff contact information that could be used by the participants at any time. Student achievement scores were one data point and teacher report of changes they made to instruction was another data set.

At the conclusion of the study, all teachers increased their ability to change instruction to meet student need. The students showed significant increase in their computation abilities in both treatment groups. There was no significant difference between groups for either student scores or teacher performance, suggesting that both

self-monitoring and consultation could be promising methods of professional development in rural settings.

*Devlin-Scherer et al. (1997)*. The other research noted in the Arnold et al. (2005) review also compared two different approaches to teacher development (Devlin-Scherer et al., 1997). In this study, 13 teachers (10 elementary and 3 high school) were given the choice to be a part of a Teacher Study Group (TSG) or a Principal/Supervisor Group (PSG). To begin, all principal/supervisors participated in a seven-day training on the Stallings Observation System (SOS). This system includes direct, quantified classroom observations that are run through a computerized system comparing the teachers' performance with teachers who have been found to have classrooms with high student achievement. Once the principal/supervisors finished training, they completed classroom observations over three consecutive days. The teachers were then given the choice to be a part of the TSG or the PSG to analyze their individual, computer generated classroom profile based on their classroom observations.

TSG participants met with a certified trainer for five sessions, discussing research on teaching, classroom management, grouping, feedback, and reviewed the results of their classroom profiles. Following these sessions, the teachers conducted three peer classroom observations. The PSG participants met with the principal/supervisor to review the results of their classroom profiles and make a commitment to change classroom performance.

Based on their pre-post classroom observation data sets, as a whole the teachers in both the TSG and the PSG groups increased their performance on 30 of the 49 variables

monitored. Comparing the two sets to determine differences in changes between the groups, the TSG group out performed the PSG group significantly ( $p < .002$ ) on the Student-Off-Task variable. This result indicates that students were engaged in a learning task more often in the PSG group than in the TSG group. The students in the classroom with higher on-task time are likely to learn more because they are engaged in learning activities more often than students in the TSG group.

*Summary of the Teacher Development Research Described*

Summing up the research that has been described in this section, there are definite themes to the processes of teacher development described regardless of the size of school or content taught/studied. The themes will be listed, however, the list of themes cannot replace the actual study of comprehension strategy teacher development processes in rural settings. The only way to know the best methods of teacher development in comprehension strategies for rural schools is to conduct the research. The current study will help to fill that gap. The following is the list of themes across the studies described:

1. In all studies, the training and/or development process was conducted and led by a trainer/consultant/researcher from outside the district. These consultants were responsible for a variety of activities including: sharing research information, observing classrooms, modeling lessons, coaching and leading reflection and discussion.
2. Other learning activities teachers participated in included study groups, analysis of student data, videotape viewing of expert teachers and/or participant teaching videos, and reading of research articles.

The use of videotapes as a means of reflection and teacher development has been a part of each of the studies mentioned to this point. The practice of videotaping has a growing body of evidence to support its usage in teacher development processes. Some of that research will be discussed next.

### *Videotaping as a Means for Teacher Reflection*

The term “video-clubs” (Sherin & Han, 2004) has begun to emerge in the research on teacher collaboration and teacher development. Much of the research done with this method has been conducted with teachers of mathematics, generally at the middle and high school levels (Borko, Jacobs, Eiteljorg & Pittman 2008; Sherin & Han, 2004; Sherin & van Es, 2005). With the exception of the Borko et al. (2008) study, which was conducted in an urban school district, it is unknown as to the size of school within which the studies were conducted.

The approaches to using videotapes in the studies have been similar. The teachers videotape their classroom lessons and meet on a regular basis to hold discussions about the lessons. In three studies reviewed, the researchers served as the discussion directors. In one case (Sherin & Han, 2004) the discussion began with generic questions like “Any comments?” or “What did you notice?” and data was taken on the specific topics, or “call outs” the teachers paid attention to in the videos. The researcher also wanted to know if the call outs the teachers noted involved student thinking.

Sherin and Han (2004) found that teachers’ call outs and discussion changed over the one-year period of the study. At first, teachers noticed more about what and how they were teaching, i.e. the decisions they made in lessons and the types of questions they

asked. The only times the teachers talked about student thinking was when the researcher prompted them with a question about it. Later in the study the teachers began to ask more questions about how students were processing the information, without the researcher prompting them, and less about their own teaching actions.

Sherin and van Es (2005) followed a similar format as the study previously mentioned, and included the use of a software tool called VAST or Video Analysis Support Tool, to assist teachers as they evaluated their teaching videos. The VAST program allows teachers to import their teaching video and provides a series of supports that foster the analysis of the video. The supports prompt teachers to analyze their video in three areas: (a) student thinking, (b) the teacher's role, and (c) classroom discourse. Teachers are asked to respond to questions within those three areas. The questions are (a) What do you notice? (b) What's your evidence? (c) What's your interpretation of what took place? and (d) What questions do you have about what occurred? Sherin and van Es (2005) found that over time, the teachers began to use a more interpretive approach to their analysis of the videos as compared to the evaluative approach they used at the beginning of the study, similar to the previous study mentioned.

In another study, Borko and her colleagues (2008) used video discussion groups as a part of a teacher development program for algebra teachers. Seven teachers participated in a 2-week algebra institute, followed by two years of monthly, full-day workshops where teachers mainly watched and discussed video clips from their teaching. The researchers found similar results to Sherin & Hall's (2004) study. The teachers began the study talking mainly about their instructional techniques and as the study progressed,

talked more about the thinking their students were doing. Both studies also indicated that the researcher, serving as the discussion director, had to encourage discussion about student thinking at the beginning of the study but by the end of the study the teachers were asking those types of questions without prompting.

The research on video clubs suggests that the method can be used as a tool to assist teachers as they learn about their instructional practices and dynamics between their instructional practices and their student's thinking.

### *Teacher Collaboration and Change*

All of the studies mentioned to this point have included some form of collaboration between teachers. Regardless of the method of grouping, collaboration is a component of successful teacher development processes. Change and teacher development researchers (Eaker, Dufour, & Dufour, 2002; Fullan, 2008; Guskey, 2002; Hargreaves, 1994) know how critical the right type of collaboration can be for successful teacher change.

In his book, *The Six Secrets of Change*, Michael Fullan (2008) outlines three conditions he believes are critical for what he calls, "positive, purposeful, peer interaction" (p. 45), one of the six secrets of change. Positive, purposeful, peer interaction works under three conditions: (a) when the larger values of the organization and those of individuals and groups mesh; (b) when information and knowledge about effective practices are widely and openly shared; and (c) when monitoring mechanisms are in place to detect and address ineffective actions while also identifying and consolidating effective practices.

Comparing these conditions to the studies of successful teacher development it is clear how important purposive collaboration can be. In the studies of reading comprehension strategies, it was difficult to ascertain if the values of the organization were meshing with the individuals and groups of participants. When the participants in the studies were willing to try and experiment with new teaching methods, they made more progress. In the Taylor et al. (2004) study in particular, the teachers in the one school they highlighted, were part of a school system that had high reform effort scores *and* the teachers believed in the reform effort. In that case, the school made more gains than other schools with lower reform effort scores. When teachers did not “buy into” the implementation, as did some of the teachers in the El-Dinary and Schuder (1993) study, the teachers reported they were unlikely to try the technique again.

Another condition Fullan (2008) suggested is key to successful collaboration is when information and knowledge about effective practices is shared widely and openly. It is not enough to just change for change sake, but be guided by research and evidence of teaching practices that work. In general, information sharing in the studies reviewed involved the assistance of a person with knowledge about the topic of study. In one of the cases (Taylor et al., 2004) the teachers used resources from an internet cite as their means of information gathering. In all studies, information was being gathered and shared in a variety of ways.

The final condition relating to monitoring of progress is demonstrated in different ways across the studies. In many of the studies, progress of the teacher was monitored regularly. In the video clubs (Borko et al., 2008; Sherin & van Es, 2005) the teachers

monitored and reflected their progress by evaluating their teaching via videotape. In their reflection and discussion, they shared positive teaching incidents and areas for improvement based on their video analysis. Anderson (1992) used similar procedures. Teachers noted shifts in their own instructional performance via videotape.

Another aspect of monitoring progress includes the use of analysis of student data. The Allinder and Beckbest (1995) study demonstrated how teachers used CBM's of student progress to inform and improve their instruction. As they changed instructional methods, they monitored the effects the change had on student performance. They adjusted instruction based on student progress. Tracking student progress can also have effects on teachers' willingness to continue to change.

Fullan and Hargreaves (1996) stated, "Teacher development and student development are reciprocally related" (p. 82). When teachers noticed changes in student performance based on the changes they were making to instruction, they were more likely to want to continue that change. Guskey (2002), a change and teacher development researcher, also found this to be true. He believes that it is actually the experience of successful implementation with students that changes teachers' attitudes and beliefs.

Successful collaboration is not just about getting teachers together to talk about their teaching. In order to help purposeful change in instruction occur, collaboration should have a clear sense of purpose for the teachers and the organization, should include the sharing of new information, and include tools for monitoring progress of either teacher or student progress or both.

### *Research Purpose and the Current Study*

The final section of this review focuses on the purpose of the current study, explaining gaps in the research evidenced in the area of teacher development of comprehension strategies instruction in the rural setting. Finally, the guiding questions are presented.

### *Research Purpose*

The research on teacher development methods focusing specifically on comprehension strategies instruction is growing and offering insight into ways to increase reading and teaching performance. These studies indicate that when comprehension strategies are taught explicitly, students increase their ability to comprehend text (Anderson, 1992; Brown & Coy-Ogan, 1993; Brown et al., 1996; Duffy, 1993; El-Dinary & Schuder, 1993; Taylor et al., 2004; Pressley et al., 1992). Additionally, these studies indicate that when teachers are taught how to teach comprehension strategies, most teachers increase their performance. The research is clear however, that it takes a great deal of time and support for teachers to become strong comprehension instruction teachers.

Comprehension strategies instruction is difficult and time consuming for teachers and teacher developers, however, when implemented successfully their efforts increase students' comprehension of text. It is important then to continue to research methods of teacher development that will increase the knowledge base of programs that are effective and efficient in developing strong reading teachers.

Much of the research on teacher development in the area of comprehension strategies instruction, with the exception of the Anderson (1992) and Brown and Coy-Ogan (1993) studies, have been limited to full-scale reading reform efforts in districts where considerable amounts of time and resources have been allocated for teacher development. All studies were conducted in large school districts. No research studies were found that were conducted in rural school settings regarding comprehension strategies instruction.

Rural settings have specific needs when it comes to teacher development. In most small schools it is rare to have staff specifically hired for teacher development or coaching of teachers. Most teacher development is at the discretion of individual teachers. In some schools and school districts principals are responsible teacher development programs. In larger schools, teacher development may be the principal's only responsibility. However, in smaller schools it is typical for principals to be responsible for all administrative tasks, making teacher development one of many responsibilities. Because of the diversity of administrative tasks, teacher development in specific areas such as reading, may not be adequately addressed.

Another difficulty with some teacher development programs for rural settings is related to the number of teachers on staff. Some teacher development programs emphasize the value of collaboration among teachers (Anderson, 1992; Taylor et al, 2004). In some rural settings it is rare to find more than one teacher per grade level and in some cases, teachers are assigned to teach more than one grade. Although there are possibilities for collaboration, the nature of the collaboration would be inherently

different in rural settings than in large schools that have five, ten or twenty teachers teaching the same grade level. The existing studies on teacher development do highlight the differences between settings, making it difficult to generalize the findings of such studies to settings that are not similar.

To increase the scope of the research support for teacher development, more research is needed in a variety of settings with differing levels of need. It is important to know how to help groups of teachers change their instruction. It is also important to know how to help schools help teachers learn and grow. Again, the research gives suggestions for larger school districts, but it is rare to find research on teacher development programs that can assist rural schools.

This study will begin to build evidence for the field of teacher development in comprehension strategies instruction for teachers working in rural settings with limited resources in both teacher development time and personnel.

### *Guiding Questions*

The current study is a qualitative case analysis describing, analyzing and interpreting two teachers' involvement in a rural school, using a teacher development process centered on the explicit instruction of reading comprehension strategies. The following questions guided this inquiry:

- 1) How does a teacher development process using videotaped strategy instruction and teacher discussion relate to the development of instructional skills in elementary grade teachers?

- 2) How do rural-school teachers' understanding of comprehension strategies change over time?
- 3) How will rural-school teachers' understanding of teaching comprehension strategies change over time?
- 4) How will individual rural-school teachers experience the teacher development process?

#### *Guiding Questions Hypothesis*

My first hypothesis is that because of the teacher development process, teachers' abilities as comprehension strategies instructors will increase. Teachers will include more information in their lessons about what comprehension strategies are, how they can be used to help make meaning, specific examples of when they can be used, modeling of strategy use and verbalization of student thinking. My second hypothesis is that teachers will have a deeper understanding of comprehension strategies as processes rather than procedures, and instruction of strategies reflects that understanding. The teachers will understand that comprehension strategies are more than basic steps and procedures, but complex processes of thinking and self-regulation that good readers use to understand what is read. They will begin, but may not fully understand, that instruction of comprehension strategies reflects the same complexity the teachers will come to understand about comprehension strategies. Finally, the teachers will experience a teacher development process that meets their needs and teaches them new approaches and understandings about comprehension strategies and instruction.

## CHAPTER 3

### METHODS AND PROCEDURES

This is a case study of two rural school teachers participating in a teacher development program emphasizing the explicit teaching of comprehension strategies. Data were gathered from a variety of sources to describe the relationships the teacher development program had with teachers' instructional performance, understandings of comprehension strategies and the instruction of those strategies, and teachers' perspectives on the teacher development program as a tool for increasing professional knowledge and practice.

I chose case study methodology as my approach to this research, because case studies focus on individuals within a specific context or "bounded system" (Barone, 2004; Creswell, 1998; Stake, 1995). In this specific case I set out to understand two teachers' experiences and understandings while engaging in a teacher development program emphasizing the explicit teaching of comprehension strategies.

#### *The School*

The research on teacher development in the area of literacy has focused mainly in large schools that were a part of a larger change project. In most of the studies, the schools hired staff developers and/or researchers with the expertise and funding sources to support a long-term teacher development program. In small, rural schools with limited funding and staffing resources, it is more difficult to implement teacher development programs that are long-term and include the addition of staff to guide and sustain the process. Without this information and training, rural school teachers may not be afforded

the necessary information and training to increase their teaching skills as do teachers from schools with the resources available to sustain long-term teacher development projects.

One example of a large-scale research project that would be difficult to emulate in a rural school without the benefit of added resources is the CIERA School Change Framework study (Taylor et al., 2004). Taylor and her cohorts worked with 13 schools (7 in large urban areas, three in towns of fewer than 100,000 people, and three in rural areas). Eight of the schools had been a part of the project for two years and five of the schools were in their first year. Those 13 schools had access to resource materials through a website developed for the CIERA School Change project that included research articles, research supported teaching ideas, video clips of effective practice, and activities for groups of teachers to use as guides for their professional development. Additionally, eight of the schools were in their second year of implementation within the large-scale Change Framework that had specific recommendations, based in research, that were being implemented to increase reading achievement for those schools.

The type of teacher development framework presented in this research study would be difficult to emulate in almost any other school district without the resources that the developers offered. It might be feasible in larger schools that have curriculum directors or reading coaches as members of their staff that are devoted to the development of this type of framework, however it is not common to have a curriculum director as a member of rural school staffs. The principals and teacher leaders are considered the curriculum directors in rural schools. Therefore, individual rural teachers or schools

would need to coordinate and develop all the staff development program with limited amounts of time and an already full schedule with managing all other aspects of the school.

The CIERA School Change Framework article is just one example of the types of large-scale reform that is presented in the research articles found on teacher development. Although these projects can help inform directions for teacher development programs in general, they are limited in their ability to be replicable in smaller settings. With this in mind, I considered several school districts with student populations of less than 500 students, located in communities with predominately agricultural economies. After considering several schools, my final decision was made based on proximity and willingness of the district to participate.

The school is in a Midwestern farming community and is a consolidated school district, populated from two rural communities. The school includes all grades from kindergarten through twelfth grade, with one teacher per grade level at the elementary school (i.e. Kindergarten – sixth grades). Class sizes average 25 students with a student population of about 315, K-12.

I contacted the Superintendent of the school by telephone, explaining the research study design. The superintendent gave verbal and then written permission for several teachers from the school district to be contacted for participation in the study. Prior to contacting any teachers, I received permission from the Institutional Review Board (IRB) to complete the study.

### *Considerations for Determining the Participants*

There were several considerations when deciding the number of teachers and grade levels to include in the teacher development program. I was interested in working with teachers that emphasized comprehension strategies in their lessons. The grade levels third – sixth were chosen because most reading curriculum at the upper elementary grade levels focuses on comprehension strategies instruction.

I also wanted to work with teachers in a setting where they were: (a) the only ones teaching their grade level, (b) did not have readily accessible professional resources to draw from, and (c) had limited opportunity for professional dialogue with teachers teaching the same grade level as is the reality in many rural schools. It was also important to include at least two teachers in the study for two reasons. First, the teacher development program included a discussion group component. Second, one of the guiding questions for this research dealt with individual responses and understandings of the teacher development program. To see how teachers experienced the teacher development program individually, more than one teacher was needed. The differences could inform how future teacher development programs are created by keeping these differences in mind as they are developed. Because the design of the professional development sessions called for the teachers to discuss the implementation of their strategy lessons, I wanted to take advantage of the social cognition that would naturally be fostered in these sessions.

*Choosing the teachers.* During a monthly staff meeting, the Superintendent of the district explained the research project and asked if there were any teachers interested in

being a part of the study. Three teachers, teaching upper grades (third – sixth grades), volunteered to participate: Kendra, Sandy, and Cathy (pseudonyms). The Superintendent sent the names of the teachers to me, and I contacted them via mail. The mailing included a letter detailing the research project, a consent letter and a return envelope that could be used to mail the signed consent back. All three teachers agreed to participate in the study by returning the signed consent. Table 3.1 gives some background information on the teachers.

Table 3.1

*Teacher's Descriptive Information*

	Grade level	Subjects taught	Years of experience
Teacher 1: Kendra	Third	All subjects	3
Teacher 2: Sandy	Fourth	All subjects	6
Teacher 3: Cathy	Fifth and Sixth	Science Social Studies	26

Sandy was unable to participate in most of the data collection activities due to medical issues. She participated during baseline determination, was absent through the months of January, February and March, and then completed the last two months of research, April and May. Although she missed all training sessions except the last session, she did consent to full participation in the research study. Due to the limited amount of data obtained, her data was not used in the analysis, although one of her

videotaped lessons was used in the first training session to demonstrate a positive example of explicit teaching of a comprehension strategy.

### *Instruments*

Two instruments were used to gather data throughout the study: (a) the Rating Scale for Explicitness of Teacher Explanation, or RSETE (Duffy et al., 1987) and (b) the Theoretical Orientation to Reading Profile, or TORP (Deford, 1985).

#### *Rating Scale for Explicitness of Teacher Explanation (RSETE)*

The RSETE (Appendix A) is based on the theory that good comprehension strategies teaching is explicit, and teacher effectiveness can be rated on three categories of lesson presentation: (a) the information presented about the strategy, (b) the means to present the information, and (c) intra- and inter-lesson cohesion. Raters evaluate these components using several indicators. A brief description of these categories and their indicators follows.

*Information presented about the strategy.* When rating teachers on their presentation about the strategy, the indicators for teacher effectiveness include how well the teacher (a) explains that the strategy is a problem-solving tool, (b) explains how the strategy can be used when reading, (c) explains how to choose the best strategy to help solve a reading problem, and (d) gives a description of the mental processes used to employ the strategy.

*The means to present the information.* When rating teachers' lessons on the means to present the information, observers rate (a) the introductory statement about the strategy, including how the strategy is used in a "real text" situation and what to pay

attention to when using the strategy, (b) teacher effectiveness in modeling usage of the strategy, (c) the provision for guided student practice, (d) how well teachers elicit student responses that include the mental processes employed when using the strategy, and (e) teacher effectiveness when bringing closure to the lesson.

*Intra- and inter-lesson cohesion.* The observers rate teacher effectiveness in bringing: (a) a sense of cohesion to the lesson, and (b) cohesion with the current lesson to past and future lessons.

#### *Theoretical Orientation to Reading Profile (TORP)*

In the TORP (Appendix B), teachers respond to 28 statements about reading processes and reading instruction using strengths of agreement and disagreement, with strongly agree being a one (1) and moving to strongly disagree being a five (5). The statements are grouped into three categories: (a) phonics, (b) reading skills, and (c) whole language statements. The strengths for each category are averaged to arrive at composite scores for each category.

Deford (1985) suggests that the belief systems of teachers regarding their theories about reading instruction determine their actions in the classroom. The closer they are to a particular orientation, the more predictable their behavior will be. I used the results of the TORP, along with ratings from their teaching lessons in January, to determine a baseline of instructional performance orientation for each teacher.

The following examples are statements used in the three categories of the TORP: (a) Phonics: “A child needs to be able to verbalize the rules of phonics in order to assure proficiency in processing new words”; (b) Reading Skills: “Fluency and expression are

necessary components of reading that indicate good comprehension,”; (c) Whole language: “Materials for early reading should be written in natural language without concern for short, simple words and sentences.” The higher the average for a category (i.e. phonics, skills or whole language), the more likely the teacher will demonstrate a theoretical orientation to that approach to reading instruction. The TORP has a reliability of .98.

### *Exit Interview*

A semistructured interview format (Hatch, 2002) was used to develop an exit interview for the teacher (Appendix C). The interview was developed to better understand the teachers feelings about the teacher development program. The semistructured format was used to have the flexibility to ask probing questions if the opportunity arose to either add detail to an answer and/or get more information about a topic than was supplied by the guiding questions. For example, I asked Cathy if there were any activities she felt were useful during the training. She gave examples of student activities she was planning to use. I wanted to get more information about the types of training activities she found useful, so I asked, “Was there anything about the actual training part that you liked?” to add detail to her answer.

### *Procedures*

#### *Overview*

Once permission from the teachers was granted to work with Cathy, Kendra and Sandy, I began gathering data. In this study, I established baseline information first, then introduced a teacher development program and noted the effects the teacher development

had on instructional performance. Finally, teachers were interviewed to better understand their reactions to the teacher development program.

Table 3.2 sets forth the timeline and steps that were followed in the study along with the data sources gathered at each step. Following the table are descriptions of the steps and data sources.

Table 3.2

*Research Procedures and Data Sources*

Month	Step	Data Source
December	Introduction meeting	1. TORP <sup>a</sup> 2. Transcription of meeting
January	Baseline	1. Videotaping of teaching lessons 2. Transcription of videotapes 3. Rating of videotapes <sup>b</sup>
February	1. Training Sessions	1. Transcription of training session
March	2. Every-other-week videotaping of teaching	2. Videotaping of teaching lessons
April		3. Transcription of videotapes 4. Rating of videotapes
May	1. One videotape of teaching	1. Videotaping of teaching lessons 2. Transcription of videotape
September	Teacher interviews	1. Transcriptions of interviews

*Note.*

<sup>a</sup>The TORP is the Theoretical Orientation of Reading Profile, (Deford,1985). <sup>b</sup>The videotapes were rated using the Rating Scale for Explicitness of Teacher Explanation (Duffy et al., 1987).

### *Introduction Meeting*

I contacted the teachers via email, setting up an introduction meeting. Case study researchers (Creswell, 1998; Stake, 1995) suggest getting acquainted with the specific case early, in an unobtrusive way and not rush into data gathering if at all possible. Keeping this in mind, the teachers and I agreed to meet in December at the teachers' school, at the end of the school day to get acquainted, share the research plan and answer any questions they had regarding the plan before I started gathering data (Appendix D). During the meeting, the technology coordinator of the school, the teachers and I set up a plan for each teacher to have videotaping equipment set up in their classrooms when needed. The meeting was recorded and transcribed for analysis.

*Research plan and process.* I outlined the research plan and the teachers' role in the research process. In January, the teachers needed to videotape themselves teaching comprehension lessons three times, at any time of their choice, and then mail the videotapes to me. I used three lessons as my baseline ratings. I felt that within three lessons the teachers' ratings on the rating scale would be consistent enough to determine their instructional performance. Each teacher was given videotapes and return envelopes for the videotapes. The teachers were able to choose any lesson they wanted to tape. The only guidance given was that the lessons needed to be comprehension strategies lessons. I wanted to see only lessons on comprehension strategies, not on other aspects of reading such as phonics or fluency.

I explained that the videotapes would be viewed and rated by a trained research assistant and me. We would use the RSETTE to evaluate the lesson transcripts. The

teachers were given a copy of the rating scale but there was no discussion about the rating scale items during this meeting.

*February, March and April.* After the rating scale was handed out, I explained the expectations for the months of February, March and April. A training and discussion group session, or TD session, was scheduled for each month. We agreed to meet on the first Monday of every month and agreed to an hour-long TD session. Additionally, the teachers would videotape themselves every-other week and mail the videotapes to me.

The teachers were asked to keep a journal. The journal would include the dates and topics of comprehension lessons that they taught every day, along with “nuggets and lumps”: nuggets being things they thought went well with the lesson and lumps the things they felt did not go as well. A final section of the journal would be questions the teachers had about teaching comprehension strategies or other topics about the research. For example a teacher might have a question about how to have students explain their thinking. They might also have a question about when they should be teaching visualization or prediction.

At the conclusion of the meeting, the teachers completed the TORP. The TORP was scored and used in the next step of the study.

### *Baseline*

Baseline data were gathered to note the changes in instructional performance during the course of the study. I determined a baseline using three data sources. First, the TORP results were calculated and put into table form. Second, ratings from the teachers’

videotapes were generated, entered into a spreadsheet and plotted on graphs. Rating procedures were outlined next. Third, videotapes were transcribed.

*Procedure for rating videotapes.* Prior to the study, I asked a teacher with whom I work, to be my research assistant. She was chosen because she showed an interest in research and comprehension strategies instruction. The assistant completed the university ethics training. We met several times to discuss the rating scale and practiced rating volunteer teacher videotapes to increase inter-rater agreement. Two teachers, in the school district where the trained assistant and I are employed, volunteered to share comprehension strategies lesson videotapes for training purposes. The assistant and I scored six lessons prior to the study, clarifying discrepancies and agreeing on the meanings of the indicators and the ratings.

Based on the ratings from our practice lessons, we noticed that our ratings were not one-to-one matches on a consistent basis. Although the ratings for the practice lessons were not kept and no inter-rater reliability calculated for those ratings, there was enough discrepancy in the ratings to necessitate the use of consensus, even after the practice lessons were complete. With that in mind, the following procedures were used to rate the lessons of the study.

*Baseline ratings.* In January, the teachers each sent three videotapes of teaching lessons they determined to be comprehension strategies lessons. The assistant and I rated the videotaped lessons. We watched the videotapes submitted by the participating teachers together, but rated the lessons independently. Once the independent ratings were

complete, we discussed our results. When there were discrepancies between ratings, we offered reasons for making our determinations and reached consensus for a final rating.

All independent ratings were compiled onto a spreadsheet, and inter-rater reliability was determined (Table 3.3). All ratings for each indicator on the rating scale for all teachers were used to determine straight agreement, percentage of agreement, and the Cohen's Kappa statistic was calculated. This statistic was used because it takes into account the agreements of ratings that could have been made by chance. A score of less than .70 is considered not satisfactory.

Table 3.3

<i>Inter-rater Reliability Scores by Indicator</i>			
Indicator	Straight agreement (total 10)	Percentage agreement	Cohen's Kappa <i>K</i>
Informing	11	69	.49
Usefulness	12	75	.66
How to decide	11	69	.49
How to perform	13	81	.72
Introduction	12	75	.63
Modeling	12	75	.61
Shift instruction	13	81	.57
Elicit responses	12	75	.54
Closure	6	38	.18
In lesson	12	75	.62
Past and future	10	63	.48

It is suggested that for any  $K < .70$ , more training for raters should be conducted on using the rating scale. In this case, even with consistent practice and review of the rating scale, one rating (how to perform the strategy) met the satisfactory score of  $> .70$ . The reliability scores evidenced the need for building consensus through discussion between raters in order to have reliable data. It also indicated the need to triangulate the data using another source of information. Qualitative transcription data from taped lessons and training sessions were used to validate findings.

At the end of January, all ratings, graphs, transcriptions of videotapes and TORP results were analyzed to make a final baseline determination of each teachers' instructional performance.

#### *Training and Discussion Group Sessions, or TD Sessions*

The next step of the research process was continued transcription and rating of videotaped teaching lessons and the introduction of the teacher development program. The transcription and rating of teaching lessons was important throughout the study for several reasons. First, the ratings and transcriptions were used as data collection pieces to make determinations of teacher change. Second, I used the transcriptions and ratings to determine TD session agendas. The steps for developing those agendas will be discussed later.

The teacher development program included three sessions in which teachers learned about explicitly teaching comprehension strategies, and participated in discussion and reflection about their teaching based on their videotaped teaching lessons. We agreed

to meet after school, in one teacher's classroom, the first Monday of each month for the months of February, March and April. I audio recorded and transcribed each session.

I developed the TD session agendas keeping the components of effective teacher development programs research in mind (Brown et al., 1996; Brown & Coy-Ogan, 1993; Duffy et al., 1987; Duffy, 1993; El-Dinary & Shuder, 1993; Pressley et al., 1992; Taylor et al., 2004). The teachers in those studies believed that having consistent feedback and reflective conversations about their teaching performance, with the support from trained coaches or researchers, was helpful in increasing their instructional performance. Modeling of strategies lessons by coaches or researchers was also helpful for many teachers.

With this in mind, each TD session included: (a) a training, or new learning, using a PowerPoint presentation (b) modeling of strategies lessons, (c) discussion/reflection, (d) a review of research needs for the study (i.e., due dates, videotapes), and in TD sessions #2 and #3, (e) viewing and discuss/reflection of video segments. Teachers were given training materials depending on the agenda items for the session.

*New learning and videotape segments.* Each TD session began with new learning. I chose the topics to be presented for new learning as well as the coaching and reflection points based on the lesson ratings and transcriptions. I determined new learning topics when teacher's instructional performance was low on indicators of the ratings scale. I wanted to make sure that the focus of the TD sessions included information that would increase their instructional performance. The decisions were made purposefully to increase their knowledge and level of reflection on their performance as indicated by

their rating results for using a comprehension strategy focus of their choice. The teachers chose the comprehension strategy focus from a list of strategies shared during the first training session. The strategies were those cited in Chapter 2 including: summarization, representational imagery, story grammar/structure, prior knowledge activation, question generation and question answering.

When deciding on the focus topics, I reviewed the ratings and transcriptions of lessons for each teacher up to that point in the research, noting the teachers' areas of strength and areas for growth. I developed a PowerPoint (Appendix E) that would increase the teachers' knowledge of the areas of weakness and, for TD sessions #2 and #3, went back to the videotapes and found the segments of the lessons where teachers demonstrated the area where instruction could be improved and an area of strength. We viewed the video segments, reflecting on positive instances and areas that could be improved. I wanted the teachers to be able to see themselves doing positive things as well as noting areas they could improve.

*Modeling strategy lessons.* The research on teacher development (Duffy et al., 1987; El-Dinary & Shuder, 1993; Pressley et al., 1992) indicates that teachers benefit from coaches or researchers modeling strategies lessons I used the following procedures to develop the strategy lessons I modeled and the resource sheets the teachers received.

- First, the participating teachers chose a strategy focus for each TD session using the list of strategies presented during the introductory meeting.
- Second, I reviewed research studies and teacher resource books for lesson ideas. Table 3.4 lists the strategies used and the materials reviewed for each

strategy. Only lessons or activities emphasizing the use of strategies in adaptive, flexible ways, using real text material, were chosen. I compiled the lesson ideas into a resource sheet, one for each strategy (Appendix F, G, and H).

- Third, I chose reading materials using both nonfiction and fiction and grade specific (i.e., third – sixth grade) text. I was specific about the text because I believed it was important for teachers to see lessons modeled that were appropriate for the students they were teaching. It was also important to use both fiction and nonfiction not only because one of the teachers taught social studies and science, but because students need to learn how to use the strategies in all types of text.
- Fourth, I developed a lesson plan, which I followed when modeling strategy lessons. During the lesson, I acted as teacher and the participants acted as students. I taught a lesson, explicitly explaining strategies and offering student practice with the strategies. I implemented the strategies that teachers or researchers used in the studies of effective comprehension strategies lessons research (Block, 1993; Brown et al., 1996; Duffy et al., 1987; Palincsar & Brown, 1984; Pressley & Afflerbach, 1995; Rosenshine & Meister, 1994). An example of a part of a visualization lesson follows. “When we visualize, we create pictures in our mind that belong only to us. They help us connect with the text. I like to use this strategy when I am having a difficult time figuring out what the author is trying to tell me or I am confused about something. I

think about the words and then try to create a picture of what they are saying in order to get a better idea of the story.”

Table 3.4

*Materials Reviewed by Strategy*


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Strategy	Materials Reviewed
Visualization	“Mental Imagery, Text Illustrations, and Children’s Story Comprehension and Recall” (Gambrell & Jawitz, 1993)
Summarization	“Does text Structure / Summarization Instruction Facilitate Learning from Expository Text?” (Armbruster et al., 1987)  “The Effectiveness of a Direct Instruction Paradigm for Teaching Main Idea Comprehension” (Baumann, 1984)  “Enhancing Main Idea Comprehension for Students with Learning Problems: The Role of Summarization Strategy and Self-Monitoring Instruction” (Jitendra, Hoppes & Xin, 2000)
Prior Knowledge	“Effects of Prior Knowledge on Memory for New Information” (Anderson, 1981)  “An Instructional Redesign of Reading Lessons: Effects on Comprehension” (Beck et al., 1982)
All Strategies	<i>Strategies That Work: Teaching Comprehension to Enhance Understanding</i> (Rev. ed.) (Harvey & Goudvis, 2000)  <i>Comprehension: Strategic Instruction for K-3 Students</i> (Owocki, 2003)  <i>7 Keys to Comprehension: How to Help Your Kids Read and Get It!</i> (Zimmerman & Hutchins, 2003)

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In each of the next sections, I briefly explain the rationale for the agenda items and detail the contents of each agenda item using a table.

*TD Session #1: February, 2008*

After reviewing the videotapes and ratings for each teacher, it was evident that the teachers had some knowledge of what comprehension strategies were because they had lessons that focused on strategies. Their teaching lessons, however, included little explicit explanation of comprehension strategies. I decided that an overview of the research on comprehension strategies and comprehension strategies instruction would be helpful to set the stage for my study. A PowerPoint was created to share that information (Appendix I). Additional agenda items included: (a) a handout on a lesson plan framework (Appendix J) that we would use throughout the study; (b) strategy lesson modeling; and (c) research study needs (Appendix K). Table 3.5 gives a brief description of the agenda items. Following the table is a description of the lesson plan framework and the visualization lesson that was modeled.

Table 3.5

*TD Session 1 Description*

Agenda Item	Format	Description
What is comprehension?	PowerPoint <sup>a</sup>	Definition of comprehension.
What is comprehension instruction?	PowerPoint	1. Definition of comprehension instruction. 2. Comprehension Strategies.
Lesson Plan Framework	PowerPoint Handout <sup>b</sup>	1. Introduction to lesson plan framework.
Modeling	activity resource sheet <sup>c</sup>	Visualization 1. Read aloud: teacher model. Text: <i>The Toughest Cowboy</i> (Frank, 2004). 2. Read aloud: student practice. Text: <i>Charlotte's Web</i> (White, 1974). 3. Two-column chart: visualize and infer. Text: <i>People of the Past</i> (Morrison, 2004).
Other items	Discussion	1. Brainstorm new strategy. summarization 2. Journal entries due dates. 3. Videotaped lessons due dates.

Notes. <sup>a</sup>Appendix I. <sup>b</sup>Lesson plan framework was given to each teacher and can be found in Appendix J.

<sup>c</sup>Appendix F.

*Lesson plan framework.* After information and discussion on comprehension strategies and instruction, I introduced a lesson plan framework. The lesson plan framework was derived from the *Rating Scale for Explicitness of Teacher Explanation* (Duffy et al., 1987) used to rate the teachers' lessons. Adjustments were made to the scale so teachers could use the statements to think about planning and strategy lesson implementation. I changed the wording of the indicators to offer teaching suggestions, instead of rating language. For example, an indicator on the rating scale stated, "Rate how explicit the teacher is in telling students how to decide which strategy to select for use when encountering a problem in reading." I changed the statement to: "Explain how to choose strategies to solve problems."

The lesson plan framework was given to each teacher as a resource for both their own planning and for discussion and reflection while watching later video segments.

*Modeling.* During this training session, I wanted to include a time where I modeled effective comprehension strategy instruction. I decided to begin with visualization, because it is a strategy that was found to be effective in increasing comprehension (Gambrell & Jawitz, 1993). It was also a strategy that neither of the teachers had used in any of the lessons that had been reviewed and rated.

I modeled the lessons and then gave the teachers a resource sheet that included a description of the activities I presented during the modeling session and other activities they could use with their students.

*Other items.* At the conclusion of the training session the teachers decided that they wanted me to model some lessons on summarization for the next TD session.

*TD Session #2: March, 2008*

Upon review of the ratings and videotapes up to the end of February, the teachers were beginning to be more explicit with their descriptions of comprehension strategies, however they rarely modeled the mental steps that were involved in using comprehension strategies, and they never asked students to explain their thinking. Their questioning of students consisted of finding correct answers, not on describing the thinking they did to get to the answers. Their instruction focused on procedures to follow, not on the thinking involved in using strategies. With this in mind, the TD Session #2 was developed (Appendix L: Table 3.6).

As in previous sessions, I began with a PowerPoint reviewing the components of the lesson plan framework, emphasizing modeling and eliciting student verbalizations of their thinking. This TD session was the first time we viewed videotaped segments. The previous sessions included mostly background information, making them too long to include viewing of videotapes and maintain the one-hour time frame that had been agreed upon by the teachers. Two segments of video were chosen. The areas of growth were segments of video where the teachers could have included either eliciting verbalization of strategy use and/or segments in the lesson where the teacher could model their thinking to give students a clearer understanding of how to use the strategies. As we watched the video segments, we noted and reflected on the things the teachers did well and the ways they might improve the lesson. We used a blank form of the lesson plan framework to guide our discussion and reflection.

I then modeled a summarization lesson for the teachers. In these lessons, I made an effort to model eliciting student verbalizations of how they got their answers, not just sharing of answers. I also demonstrated how to model my thinking to the students, so the teachers could see an example of modeling they could emulate in future lessons. At the end of this training session, the teachers decided to have me model lessons using prior knowledge as a focus at the next session.

Table 3.6

*TD Session 2 Description*

Agenda Item	Format	Description
Review	PowerPoint	<ol style="list-style-type: none"> <li>1. Review of lesson plan framework.</li> <li>2. Modeling mental steps suggestions.</li> <li>3. Eliciting student verbalizations suggestions.</li> </ol>
Videotapes	viewing discussion	<p>Kendra</p> <ul style="list-style-type: none"> <li>• Strength: Shifted control from teacher to student regulation of strategy use.</li> <li>• Future growth: Elicit verbalizations of mental steps.</li> </ul> <p>Sandy</p> <ul style="list-style-type: none"> <li>• Strength: Informing students about the strategy.</li> <li>• Future growth: Model mental steps.</li> </ul>
Modeling	discussion resource sheet <sup>a</sup>	<p>Summarization</p> <ol style="list-style-type: none"> <li>1. Sticky note activity. Text: <i>Water Wise</i> (Davidson, 2003).</li> <li>2. Two-column chart. Text: <i>The Teacher's Funeral</i> (Peck, 2004).</li> </ol>
Other items	discussion	<ol style="list-style-type: none"> <li>1. Brainstorm new strategy: prior knowledge</li> <li>2. Videotape due dates.</li> <li>3. Journal entry due dates.</li> </ol>

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Note. <sup>a</sup>(Appendix G)

*TD Session #3: April, 2008*

This was the last training session I had with the teachers. After reviewing the ratings and videotapes of teachers up to the end of March, I noted that the teachers continued to add more explicitness to their descriptions of strategies, yet, they continued to focus on teaching strategies as procedures to be followed rather than thinking processes. When developing the agenda, I wanted to see how they believed their implementation of strategies was going in their lessons. I also wanted to sum up the focus of all training sessions which was to teach comprehension strategies as flexible tools used to help make meaning when reading. Table 3.7 outlines the agenda items with brief descriptions (Appendix M).

*Nuggets & Lumps.* In the final TD session, the teachers shared their nuggets and lumps regarding implementation of comprehension strategies lessons. Nuggets were those things that had gone particularly well when implementing a new activity or lesson, and lumps were those things that did not go as well.

As in the previous TD session, I chose video segments that included an area of strength and an area of growth for each teacher. The ratings and videos that were reviewed continued to show that the teachers rarely modeled or elicited student verbalizations of their thinking. I also emphasized those two aspects of strategies lessons in my modeling of prior knowledge lessons.

Table 3.7

*TD Session 3 Description*

Agenda Item	Format	Description
Nuggets & Lumps	discussion	How are strategies and lessons working in teacher's classroom?
Making Meaning	discussion	Review emphasizing use of strategies to make meaning.
Videotapes	viewing	Cathy
	discussion	<ul style="list-style-type: none"> <li>• Strength: How to use strategies with content text.</li> <li>• Growth: Model mental steps</li> </ul>
		Kendra
		<ul style="list-style-type: none"> <li>• Strength: Shifting control from teacher to student regulation of strategy use.</li> <li>• Growth: Elicit student verbalization of mental steps.</li> </ul>
Modeling	resource sheet <sup>a</sup>	<p>Prior Knowledge</p> <ol style="list-style-type: none"> <li>1. Sticky note activity. Brainstorm what is known about vocabulary words.</li> <li>2. Three-column chart. Note connections and determine if they were important to just them or important to meaning. Text: <i>The Teacher's Funeral</i> (Peck, 2004)</li> </ol>

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Note. <sup>a</sup>(Appendix H)

*Journal entries.* At the beginning of the study, teachers were asked to keep a weekly journal of their comprehension strategies lessons. Several items were to be noted: (a) the date of the lesson, (b) the strategy taught (c) nuggets, or things that went well in the lesson, and (d) lumps, or things that did not go as well in the lesson.

After several weeks, I determined that the journals would be removed from the study. It was not practical for teachers to keep journals throughout the week, and the study would include enough data to make determinations without the journal entries.

#### *Exit Interviews*

Three months after working with the teachers and collecting and analyzing the data, I contacted the teachers by email to set up a time for an exit interview. I interviewed the teachers via telephone regarding their feelings about the teacher development program. As the new school year began, I wanted to see if they were planning to continue to use any of the ideas they had learned about in the training. The interviews were audio taped and transcribed.

#### *Data Analysis*

When using a qualitative approach to research, the analysis of data is rarely limited to one particular analysis phase in the research plan. Creswell (1998) and Stake (1995) explain that the analysis of qualitative data is an ongoing process of learning about the particular situation. There might be one point in the research plan when the researcher spends more time on the analysis of the data, but the process of learning about the case is a continuous process. The following steps were taken to analyze the types of data that were gathered.

### *Rating Scale Analysis Steps*

From the beginning of the study I used rating scale and transcription data to inform decisions for TD session agendas and video segments for viewing. In this analysis I reviewed the ratings looking for areas of instructional performance that were strong and areas that were weak. Stronger performances were indicated by ratings of 2, 3 and 4 and lower performances by ratings 0 and 1. I used that data to prepare agenda topics. For example, upon review of ratings for the month of January, the teachers had increased their abilities to introduce lessons (area of strength), but did not model strategy use at any point in their lessons (area of weakness). I then reviewed the teaching lesson transcriptions, looking for moments in their lessons that exemplified the areas of strength and weakness. I found those moments on the videotapes and used them in TD sessions for teachers to view.

The following steps were used after all data were gathered, and I was at the point in the study where I could analyze the body of evidence as a whole.

*Step one.* Individual graphs for each teacher were developed for each indicator using a spreadsheet (Appendix N), (Carr & Burkholder, 1998). I printed each graph for each teacher for visual inspection (Figure 4.1).

*Step two.* Graphed ratings were analyzed using the visual examination method suggested by Kazdin (1982) and Kennedy (2005). I reviewed the data looking at three patterns, or dimensions: (a) the level of the data (e.g. the rating scores); (b) the trend of the data; and (c) the variability, or deviation of data points from the trend. I began with the baseline information, then analyzed the training phase information and finally, noted

any changes from baseline to training. I will use Figure 4.1 to explain the process.

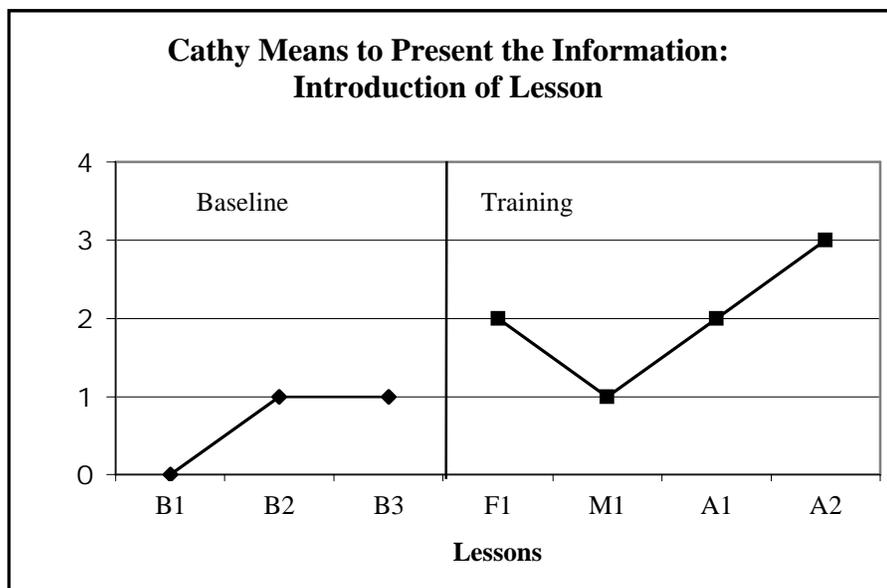


Figure 4.1: B1 is the rating from the first baseline lesson. B2 is the rating from the second baseline lesson. B3 is the rating from the third baseline lesson. F1 is the rating from the February lesson. M1 is the rating from the March lesson. A1 is the rating from the first April lesson. A2 is the rating from the second April lesson.

Starting with the baseline, I checked the level of performance. In this case, Cathy's performance in the baseline was 0, 1, and 1. I then looked for a trend in the data. When looking for trends I visually inspected the data for a line of upward movement, downward movement or no movement of the ratings. In this example, there was a slight upward trend. Next, I checked for variability in ratings.

When determining variability I looked for a trend in the data, then used the trend line to see how many points were away from the line. The more points off the trend line, the higher the variability. I decided that, if there was no change in ratings (i.e. 0, 0, and 0), there was no variability. If there was one rating off the trend, as is exemplified in the

baseline data, there is low variability and if there were several points away from the trend it was considered high variability. The closer to the trend line the data is the more likely there is an actual trend in instructional performance.

In this case, Cathy's ratings had low variability indicating that her performance was fairly consistent. In the training phase, the data were analyzed in much the same way. There is a drop at the beginning of the training phase in the example and then an incremental increase in ratings. Using the trend line and variability dimensions, the data showed that the ratings were 2, 1, 2, and 3. After the first month the ratings indicate an upward trend and there was low variability because there was only one data point off of the trend.

A final analysis was made comparing the baseline and training data using the same three dimensions. While visually inspecting the data for comparison, I noted the instances when the ratings changed. If the change was consistent, it was easy to make a determination that the teacher's performance increased or decreased, however, if the ratings were not consistent, it was difficult to make that determination. It was at that point that I calculated the mean ratings. The means described the central location of the ratings, making it easier to compare the baseline ratings with the training phase ratings. I wrote the mean ratings on the graphs by hand and later, entered the means on a table used to compile all visual inspection data. The mean ratings could be misleading because they are not interval based, thus median scores were added to the tables. I will describe the analysis part of the procedures in more detail using the example data.

Using Figure 4.1 again, I compared the ratings. In this case, the mean rating for the baseline was 0.67 and the mean rating for the training phase was 2 indicating a growth in mean ratings. Next, I noted the trend in the training phase. Again, it was important in the baseline to determine consistent performance for comparison, not a trend. In this case, there was a slight upward trend in the data. Finally, the variability was noted. In this case, variability was low with an upward trend indicating an increase in performance from the baseline means.

If there was no change when data was compared, there was no indication of an increase in performance. If there was a change in mean ratings, but with high variability, the change was noted, but because the ratings were not consistent, it would not be considered a strong change from the baseline. Throughout this process, I wrote notes about my observations and later compiled these notes into a table. All tables are included in the results section.

#### *Videotaped Teaching Transcription Analysis*

*Typological analysis.* A typological analysis (Creswell, 1998; Hatch, 2002; Tashakkori & Teddlie, 1998) method was used to analyze the transcripts first. In this method, data analysis begins with predetermined typologies, or classifications, within which data are categorized. In this study, I used the indicators from the rating scale as the typologies within which the transcribed teacher comments were categorized. For example one typology used was “Rate how explicit the teacher is in informing students that the task to be learned is a strategy for solving a problem encountered in reading.”

First, I created a chart with the typologies, or rating scale indicators, as headings (Appendix O). Included on the chart were sections for baseline lessons and intervention lessons, labeled by lesson (i.e. B1 for baseline lesson 1 and F1 for February lesson 1). I also indicated the rating that was given for the lesson and the page the comment or section of the lesson came from in the transcript for reference.

Second, I read through each transcript several times, marking teacher comments related to indicators. These comments were then copied and pasted into the previously created chart. For example, when a teacher introduced a comprehension lesson, I marked that section of text, copied that section of the lesson and pasted those comments into the section of the chart titled Means to Present the Lesson – Rate how explicit the teacher is in introducing the lesson.

Once the rating scale data were put into table format and the transcription data were organized by indicator, I combined the data sets. I organized them by indicator, placing the table of information first, then writing summary notes using the comments of the teachers as references to add detail to the ratings.

#### *Interpreting Rating Scale and Teaching Lesson Transcription Data*

After developing the summaries and reading through them several times, themes began to emerge regarding Cathy and Kendra's instructional performance. I noted the themes and the teaching sequences that exemplified those themes.

#### *TD Sessions Transcriptions*

The TD session transcripts were analyzed using the constant comparative analysis method (Amos, 2002; Creswell, 1998; Glaser & Strauss, 1967; Tashakkori & Teddlie,

1998). First, I created a chart and copied each teachers' comments from the full transcript to the chart. Second, all transcripts (each teacher separately) were read through once and emerging themes were noted on the chart. Third, transcriptions were read again, noting any other themes or patterns emerging in the data and nonexamples were noted. Fourth, another chart was developed including identified themes and teacher comments that supported those themes. Generalized statements were written for each teacher.

Once the analysis by individual teacher was complete, themes for both teachers were analyzed, checking for overarching themes between teachers. A chart was completed with these themes, and statements were written.

*Data validation.* Triangulation was used to validate themes resulting from the analysis of the TD session data. Data from both teachers were used to check themes, and exit interview data were checked for consistency in themes.

#### *Exit Interview Analysis*

The constant comparative analysis was used to analyze the interview data. I read through the interview transcripts several times, noting any commonalities or themes. As the themes emerged, I noted them in the transcript.

## CHAPTER 4

### RESULTS

#### *Instructional Performance*

The results of the teachers' instructional performance are outlined first. The two teachers' data are explained together, with headings describing instructional performance based on the three categories from the rating scale: (a) Information Presented About the Strategy, (b) Means to Present the Strategy, and (c) Intra and Inter-lesson Cohesion. A brief description of the categories is included at the beginning of each section. The description reviews and frames the results of each category.

The rating scale and transcription data are reported together as a means of triangulation. This triangulation process was used to check for accuracy of themes and validate that the themes were represented in more than one data source. Specific quotes from teachers are provided as evidence of changes in understandings and instructional performance.

#### *Information Presented About the Strategy Results*

The indicators in this category deal with the types of information that teachers share with students about strategies. Based on the RSETE (Duffy et al., 1987) lesson presentations should include declarative knowledge, or an explanation of strategies as flexible, adaptive tools to help solve comprehension problems. In addition to declarative knowledge, the explanation should include metacognitive knowledge about where and when strategies can be applied and how to decide which strategies to use depending on the problem and the text. Finally, the procedural information presented should include

showing students the mental steps to follow as they use the strategy in different situations.

*Informing Students About the Strategy: Baseline*

When informing students about strategies, the best explanations include information about how strategies are adaptive and flexible and assist in solving problems in comprehension while reading. Low performances in this indicator include no statement about what is to be learned. Lesser performances include a statement about what is to be learned and some elaboration. Stronger lessons include the naming of the strategy along with a description of its adaptiveness.

*Cathy.* Cathy began the study sharing little information about strategies with her students (Table 4.1), as the lower ratings indicate. Most of her lessons included social studies and science content information and little reading information.

Table 4.1

*Ratings Analysis Results for Information Presented About the Strategy*

Category and phase	Rating means ( <i>SD</i> )	Rating median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.67 (.47)	1	0, 1, 1	Low variability.
Training	2.5 (.5)	2.5	2, 3, 2, 3	Increase in means.  Increase from baseline.
Kendra				
Baseline	2 (0)	2	2,2,2	No variability.
Training	2.2 (.75)	2	1,2,3,2,3	High variability.  Slight increase from baseline.  Upward trend.

As I examined the data more closely, there were two instances out of the three observations, in baseline lessons, when Cathy alluded to some strategies that would assist students in understanding their reading assignment. The instances were brief comments with little elaboration. The first instance came in a social studies lesson emphasizing natural resources. Students were asked to locate key terms within the text, an activity completed during most videotaped lessons. While giving directions, Cathy made one

comment about morphology (the study of the structure and content of words) to help figure out the definition of vocabulary words. While scanning through the text, a student found the word agribusiness, noticing the Greek combining form agri, and said it out loud.

Cathy said, “If you look at the base word agri, what do you think that is related to? Those of us in this area kind of know that one easily.”

A student said, “Agriculture.”

Cathy responded, “It is related to agriculture. What is your next word?”

A student said, “Hydroelectricity.”

Cathy said, “Okay, now hydro refers to?”

A student responded, “Water.”

Cathy finished by saying, “Water. So looking at the base word, you should be able to figure out what words actually mean. Although not with alluvial [a key word previously shared]. So be sure you’re careful with that. So you are going to read, fill out the worksheet and if you look at the last three, those are definitions.”

Cathy mentioned that they could use a strategy (i.e. using the meaning of a known root word) to help figure out the definitions of words, however, she only made one comment and did not elaborate or show them how to use the strategy.

In another social studies lesson, Cathy made another statement about using the text structure headings as a strategy to understand the text. As in the other lesson, she commented on the strategy with little elaboration. “And so as we start this section, and the first heading is the United States from 1865 to 1914, there is a difference between the

rich and the poor. Even the rich and poor, white people, not just the black people. And so you're going to be looking at some things and how people were moving across the United States, when did Nebraska become a state?"

*Kendra.* Kendra's baseline lessons included more information about strategies. Kendra went beyond a single word introduction during the baseline phase of research, however her elaboration did not include statements regarding how the strategies are flexible and adaptive or can help solve problems in reading.

The following example of her performance was an introduction lesson on similes. Kendra began, "We're going to look at similes. A simile is a kind of figurative language and that is something that compares one thing to another. So we're going to look at this and it's comparing something to another something, and it's going to give you a strong idea of what something is like. So here's an example of a simile. Her heart was as big as a whale's. Would your heart really be as big as a whales'?"

A student said, "No."

Kendra continued, "But you get the feeling that she has a really big heart, right?"

In this lesson, Kendra told the students what they would learn about, e.g. similes and shared a reason to use the strategy, "It's going to give you a strong idea of what something is like." Her explanation did not include information regarding how the strategy can be used to help solve problems while reading, including a specific example from a text.

*Baseline summary.* Cathy and Kendra shared different types of information about comprehension strategies with their students during baseline lessons. Cathy shared

mostly social studies and science content information. Kendra shared procedural information about strategies with no description of the metacognitive nature of strategies.

*Informing Students About the Strategy: Results After Training*

*Cathy.* After training, Cathy increased her performance by adding more explanation to the information she presented about comprehension strategies. She included more declarative knowledge about the strategies and how strategies are used to help solve problems. She also included more information about procedural use of the strategies like how and when they are used.

After one training session introducing the usage of explicit instruction in strategies lessons, Cathy used visualization in a social studies lesson as a strategy to help understand cultures. At the beginning of the lesson Cathy said, “So you’re visualizing it in your head. I am going to read you a quote that tells you a little about what they call visualization. This is something you do and often this is something you do when you are reading a book, so when you’re reading a book for pleasure, sometimes you [use] visualization and you can see what’s in your head. [reading the quote] ‘As you muse over a poem, or you read a novel, or you pause over a newspaper, sometimes a picture forms in your mind. Certain tastes or smells or sights and feelings emerge. Depending on what you are reading and what life experiences you bring to it. Information comes to you through your senses.’ This technique called visualization, this is what I want you to concentrate on today while you are reading your section in social studies and we don’t often do it in social studies but I think this is one that will work.”

In this lesson, Cathy told students the strategy focus (i.e. visualization) along with an explanation of the strategy through the use of the quote she read. She elaborated further by adding information about how the lesson for the day would be a good one for using visualization.

In another social studies lesson, after two training sessions (one of which included video tape analysis of explicit sharing of information), Cathy continued to add detail to her lesson presentation. The students gathered information from a variety of sources for a research project on a country. In this lesson, Cathy explained how to use note cards to help summarize information in an encyclopedia. Cathy informed them which strategy to use and why. “We are going to go into the second paragraph, however, this time, I’m going to let you work with your partner. So when you do this, you are summarizing what those paragraphs are, and using summary and finding out the most important ideas in those paragraphs. That’s an ideal place to do it is research, because you’re not going to read that whole encyclopedia article. You’re not going to read the entire textbook. You’re going to pick out the pieces to read to match the information on the outline.”

Cathy gave much more detail about the strategy in this description. She told students the strategy they were studying, (i.e. summarization). She gave a definition of summarization (i.e. finding out the most important ideas) and went on to explain a reading situation where summarization would be a good strategy to use (i.e. “That’s an ideal place to do it is research...”)

In another lesson after three training sessions, in her science class, Cathy exhibited the same type of performance, adding details to her lesson that were not present

in baseline lesson presentations. Cathy reviewed a previous lesson on simple machines, explaining how prior knowledge can be helpful. “One of the strategies that we have been talking about is the fact that sometimes I read things and I know a little bit about it. There’s some familiar terms. Many times you read things in science and it’s all new; I have no idea what I’m talking about. So let me give you an example. On Friday, when we talked simple machines, all of you had your hands up. You were all saying I knew them. You gave me examples, you were talking about that. So you are going to use this kind of strategy to understand what you are reading, when you know a little bit about it... We call this prior knowledge.”

Cathy explained the strategy focus (i.e. prior knowledge) and included a description of it (i.e. “...sometimes I read things and I know a little bit about it. There’s some familiar terms.”) She elaborated by explaining a time when prior knowledge would not be a good strategy to use (i.e. when they had knowledge of simple machines, they had information from which to draw).

*Kendra.* Kendra increased her performance slightly after training (Table 4.1). After two training and discussion, or TD sessions, she began to add more information consistently, informing the students about the strategy focus and adding some detail about the strategy. An example of her performance is a *fact and opinion* lesson. The excerpt is the introduction of the lesson. Kendra informed the students saying, “We’re going to make decisions based on what we read about fact or fiction or opinion. Fact is something that we can?”

No students responded.

Kendra continued, “Fact is something that we can prove. Somehow we can prove a fact. What about fiction? It’s something that somebody?”

A student said, “Did...is.”

Kendra said, “Is it true? It is something that someone makes up, or it’s their opinion. It’s the way they feel about something. You can’t prove it. It’s not always true. It’s something that they believe, how they feel. So we are going to read *The Best Dog in the World* and divide up sentences into whether they are fact, something you can prove, or fiction...or opinion, the way someone feels about something. Let’s start with the title *The Best Dog in the World*. Is that a fact or someone’s opinion?”

Some students said fact, some opinion.

Kendra said, “It is an opinion. You cannot prove it. It’s how someone feels about it. So, the best dog in the world goes under opinion.”

Kendra presented declarative knowledge about the strategy by saying the definitions of fact and opinion, but she did not explain how determining whether something is fact or opinion can help solve a problem while reading.

In a later lesson, after three TD sessions, Kendra added more detailed information. In this lesson the students pick out important information in order to generate a summary of a newspaper article. At the beginning of the lesson Kendra said,

When you make a summary you include the most important details to get you the summary. So when we do this today, we are going to put things that are important that we will include in our summary and we are also going to put down just things that we think are interesting about this article.

Summary's the main point of the story. This article that we have is out of today's newspaper and they are introducing a new five-dollar bill that just came out today. So you might see some of these in circulation now. We are going to read this article about the new five dollar bill and summarize it by telling us what's important and what's interesting.

Kendra shared the strategy focus – summary - and added that a summary is the main point of the story. She did not include information about how the strategy is adaptive and flexible and can be used to help understand the story.

*Summary of results for Cathy and Kendra's information presented about the strategy.* Both Cathy and Kendra increased the types of information they shared about comprehension strategies. During baseline lessons, Cathy rarely shared anything beyond content information with her students, whereas Kendra shared that information. After only one training session, Cathy began to increase the information she shared with her students. Kendra began to share more after two training sessions. By the end of the study and after three TD sessions, both teachers shared even more declarative information about strategies, including some examples and explanations of the strategies as flexible and adaptive. Neither teacher was consistent or explicit in sharing that metacognitive information with their students which would have increased their performances even more.

#### *Usefulness of the Strategy: Baseline*

When explaining the usefulness of strategies, teacher explanations should be explicit enough that students can see how strategies can help them when they encounter a

reading problem. High performances include the use of actual texts to explain that the strategy can be useful to help solve comprehension difficulties. Lesser performances include how the strategy could be used in the future (i.e. “When you get into the sixth grade...”) or is vague or general about its usefulness. Lowest performances include no reference to the strategy’s usefulness.

*Cathy and Kendra’s baseline results.* Both Cathy and Kendra informed students about the usefulness of strategies only once during the baseline phase (Table 4.2). For both teachers, this occurred in their last baseline lesson.

Table 4.2

*Ratings Analysis Results for Information Presented About the Usefulness of Strategies*

Category and phase	Rating means (SD)	Rating median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
<i>Cathy</i>				
Baseline	0.33 (.47)	0	0, 0, 1	Low variability.
Training	3 (0)	3	3, 3, 3, 3	Increase in means. Increase from baseline.
<i>Kendra</i>				
Baseline	0.67 (.94)	0	0,0,2	Medium variability.
Training	1.4 (1.36)	1	0,1,3,0,3	Increase in means. Increase from baseline.

*Cathy.* Cathy's lesson was on the settlement of the West and the events leading to Nebraska's statehood. The class talked about the document's importance and was about to read a new section of text and find facts for a worksheet. The strategy focus was using diagrams and headings to help read the text. Cathy said, "Okay, so it is not a state yet in 1865, so there is something that you are going to be reading about that gives you a big clue why in just a couple of years we were able to become a state. Read through that, make sure you look at all of the pictures and all the diagrams and look at all of the headings as you go. So you are going to do your vocabulary words, and you have some people again and not all of these are quite so familiar: Jacob Reese, you probably don't know who that is. Jane Adams, maybe you've heard of Woodrow Wilson. Any idea who Woodrow Wilson might be? How about Franklin Roosevelt?"

Cathy pointed out that the students should attend to the text structures of diagrams and headings, but she does not elaborate. Although she does point them out, in order to have a stronger performance on this indicator, she needed to explain how those headings would be useful to understanding the reading.

*Kendra.* Kendra's last baseline lesson was on using figurative language, in this case simile and metaphor, to help understand what is read. Because this lesson was previously quoted in the last section, I will not quote the lesson segment in full, but will review the gist of the lesson and explain how it relates to Kendra's teaching of the usefulness of strategies.

In this lesson, Kendra introduced the use of simile and metaphor by sharing the example of the person having a heart as big as a whale. At the beginning of the lesson, she informed students about how the strategy could be useful, but did not use a specific text example which would have directly connected the strategy to reading. Kendra did include the strategy focus (i.e. simile) and elaborated about what similes are (i.e. “A simile is a kind of figurative language and that is something that compares one thing to another. So we’re going to look at this and it’s comparing something to another something.”) She used an example of a simile, but it was not a part of a story or text, therefore not demonstrating how a simile can help make meaning while reading.

*Baseline summary.* Cathy and Kendra shared one statement with their students about how strategies can be useful during baseline lessons. Kendra’s explanation included some information about how the strategy could be used, but she was not explicit and did not use a specific text example to demonstrate its usefulness.

*Usefulness of the Strategy: Results after Training*

*Cathy.* After training, Cathy added detail to her descriptions about the usefulness of strategies. She referenced texts, but did not demonstrate or explicitly state how the strategies were used in the text to solve reading problems. She was consistent in her performance after training. The following example illustrates her ability to add detail to the information she presented about the usefulness of strategies.

In this social studies lesson, after two TD sessions, Cathy includes examples of how summarization can be useful in two different situations. The students are going to

read a new section of text, writing a brief summary sentence after each one. Cathy is giving them directions and reviewing the strategy focus.

Cathy said, “Those worksheets I gave you, let’s look at them. Your notes are going to be on here. So if you will put your name and number on this. Now when would you want to do a summary paragraph by paragraph? When would be some examples that you would want to do that?”

A student responded, “When there’s a key term in that paragraph.”

Cathy replied, “When there’s a key term in that paragraph. So as you go into junior high and may not be required to do a vocabulary word for social studies, your social studies textbooks are the same series. So they’re arranged the same way, they are going to be organized the same way, you are going to have the same types of worksheets. So when you’re reading that, pick out those key words. But you may want to do that as you are reading, because you are going to do that as you are doing your worksheet.”

In this lesson segment, Cathy shared the specific strategy she wanted them to attend to – summary - and gave them a specific text example (i.e. when there is a key term in a paragraph) and a real life situation (i.e. in junior high), to explain how the strategy can be useful. She did not share this type of information in her baseline lessons indicating a growth in her performance.

*Kendra.* Kendra increased her performance after training, but she was not consistent with her performances (Table 4.2). The first two lessons after training, Kendra did not share much information about the usefulness of strategies. At that point, she had

attended two TD sessions focusing on explicitness of instruction. In her third lesson, she demonstrated her ability to share information about the usefulness of strategies.

In this lesson, the class was going to read a newspaper article, generating summaries of the information after each paragraph. Kendra explained how she chose the particular article, paying attention to important and interesting information in each of the articles with which she read. Kendra said, “When I read this article before I printed it off for you, that’s how I chose this article. I thought, okay, there are some interesting things in each paragraph and there are some important things in each paragraph. Some of these articles that I read were already summaries, so I chose this one because it will help you find out what’s important and what’s interesting about the new five dollar bill.”

Kendra alluded to the fact that when summarizing, you look for important information and that some texts are already summaries. She referenced a specific text example (i.e. the newspaper) and explained what a summary was, but did not elaborate after that. Throughout the lesson she continually brought up the fact that summaries are important information. Although Kendra never stated that summaries are useful because they bring out the most important parts of the story, which would have increased explicitness, she alluded to it throughout the lesson.

In her fourth lesson, Kendra did not share any information about the usefulness of the strategy. During that lesson she made a brief review statement about main ideas and supporting details, put the students into groups, and had them read a section of text and list supporting details. The following information was shared with the students:

Kendra said, “We are going to pick groups and you will work with your group. We are going to work on main idea and supporting details. So I need you to, this is reading, I need you to choose (She walked around the room with a bag of names. Students drew a piece of candy.)

Kendra continued, “Remember, the main idea is what the story is?”

A student responded, “Mostly about.”

Kendra replied, “Mostly about. The supporting details are what?”

A student said, “What are supporting details?”

Another student responded, “The things that support the main idea.”

Kendra asked, “What does support mean?”

The student said, “It helps. It is supporting you.”

Kendra asked, “What is supporting details? What are they? We need some help with this don’t we? Supporting details tell more about the main idea. What I need you to do. First of all, you need to listen so you know what we are doing. We are going to work on the main idea of this selection, *The Koala Catchers*, and then you’re going to list some supporting details with your group members. Remember, the main idea is what it’s mostly about. Supporting details give more information about that main idea. So you need to quickly get with the group of the same candy.”

Kendra did not elaborate on how or why the supporting details would be useful when figuring out the main idea of the story. She focused on definitions of the terms and not their usefulness.

In her last lesson on drawing conclusions, Kendra shared information about how strategies can be useful. In the introduction of the lesson Kendra shared this information: “Remember, when you draw conclusions, the author does not tell you exactly what they want you to know. They give you lots of ideas and you are supposed to draw your own conclusion about what has happened, or what they want you to think.” Throughout the lesson students practiced drawing conclusions using a passage about tadpoles.

She concluded the lesson saying, “You drew that conclusion based on things you know about animals. So when you are reading, anytime you are reading and the author doesn’t come out and tell you exactly what is going on, you have to draw conclusions based on your own experiences, like you know we are going out to recess today, it’s not raining, it’s not snowing and it’s sunny, so we will go out to recess today.”

Kendra offered an example of a time when the reader might have a problem (i.e., when the author does not tell you everything) and that the strategy, drawing conclusions, could help make sense of the text. She went further to include a real-life situation where they could draw conclusions, however, a text example would have strengthened the lesson even more.

*Summary of results for Cathy and Kendra’s explanation of the usefulness of strategies.* Cathy and Kendra both increased their performance from their baseline performances, but the shift did not occur until after two TD sessions. During baseline lessons, both teachers shared only one statement about how strategies can be useful. By the end of the study, both teachers pointed out specific situations in reading material where problems might arise and how a strategy could be used to help solve that reading

problem. Cathy was more consistent in her descriptions than Kendra, but they both increased their performance.

*How to Decide Which Strategy: Baseline*

When informing students about how to decide which strategies to use, teachers explain how to recognize when a problem exists while reading and how to figure out which strategy to use to help with that particular problem. Lower performances include no statement about a problem situation or having to choose a strategy. Teachers might mention that the strategy could help solve a problem, but they do not explain the problem situation. Stronger lesson performances include a teacher demonstration of a problem situation along with an explanation of how they figured out which strategy to use.

*Cathy and Kendra's baseline results.* Cathy shared information about how to decide which strategy to use during one baseline lesson. Kendra did not share information about how to decide which strategy to use during baseline lessons (Table 4.3).

Table 4.3

*Ratings Analysis Results for Information Presented About Deciding Which Strategy*

Category and phase	Rating means (SD)	Rating median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.33 (.47)	0	0,0,1	Low variability.
Training	1.75 (.43)	2	2,2,1,2	Increase in means.  Increase from baseline.
Kendra				
Baseline	0 (0)	0	0,0,0	No variability.
Training	0.8 (1.17)	0	0,0,1,0,3	Medium variability.  Slight change from  baseline.

*Cathy.* In the one social studies lesson, Cathy told the students a few text features to attend to as they read the text. She stated, “Read through that, make sure you look at all of the pictures and all the diagrams and look at all of the headings as you go.” She mentioned that the pictures, diagrams and headings were there to look at, but did not inform them how to use those text features to help understanding.

*How to Decide Which Strategy: Results After Training*

*Cathy.* Cathy increased her ability to inform students about how to decide which strategy to use. She was consistent with her performance after training. The following lessons exemplify the types of information she shared with her students after training.

After the second TD session, Cathy explained to students how they could use visualization as they reviewed a passage. The lesson emphasized different methods of transportation in big cities. “At the beginning, what I was having you do was called visualization...If you’ve never been there it’s hard to picture, but we’ve all been in our home communities. It is hard to picture kind of what New York is like, but you could picture what [name of town the students live in] is like. Some of you have been to cities like San Francisco. Disney World, some of you have been there, so you’ve been to some large cities, and it [visualization] gives you an idea of what it’s like.”

Cathy included information about how visualization might help understand a situation or place (i.e. New York and San Francisco). She did not mention the reading comprehension problem that arose to use that strategy.

In the last lesson of the study, after three trainings, Cathy continued to explain how to decide which strategy to use, but was not clear as to the problem that arose to precipitate the use of the strategy.

In her last lesson, the students were conducting research on a Latin American country. Cathy reviewed the strategy, prior knowledge, and explained that research may not be the best reading situation to use the strategy. “You’re doing your research on your Latin American countries. Most of you couldn’t even pronounce, or knew anything about

the country when you were assigned. Would this (prior knowledge) be a good strategy to use when you're doing research on a Latin American country that you've never heard of? That's not the time to use that strategy. This is what we call, I'm familiar with something. We call this prior knowledge."

In this example, Cathy shared a specific time when a strategy would not be the best choice to solve a particular reading situation, (i.e. when they do not know anything about a country). She did not add any information as to when it would be useful.

*Kendra.* Kendra showed more inconsistent results in sharing how to decide which strategy to use (Table 4.3). She increased her performance slightly, but not in every lesson. There were only two times out of five lessons when Kendra explained how to recognize a problem and subsequently choose a strategy to help solve the problem. One example, during a summarization lesson, Kendra explained how to differentiate between important and interesting information, but gave no indication as to how making a summary helps solve a reading problem. In this lesson, the students read sections of a newspaper article looking for important information to generate summaries. Kendra said, "So the first paragraph when we read it, think about what's important. How would I summarize it? And what are just some interesting things that might not help me make my main points into a summary?"

In the last lesson of the study, Kendra explained a problem situation and how drawing conclusions could help solve the problem. The following lesson excerpt came at the end of the lesson after the class had practiced drawing conclusions. Kendra said, "Any time you are reading and the author doesn't come out and tell you exactly what is

going on, you have to draw conclusions based on your own experiences. Like you know we are going out to recess today, it's not raining it's not snowing and it's sunny, so we will go out to recess today."

In this lesson, Kendra stated a reading problem (i.e. "When the author does not come out and tell you exactly what is going on.") and a strategy that could help solve the problem (i.e. drawing conclusions). She ended with an example of drawing conclusions, but it was not connected to the problem situation in reading, which would have increased her performance.

*Summary of results for Cathy and Kendra's explanations of how to decide which strategy.* Both Cathy and Kendra increased their performances from the baseline phase. Both teachers shared information about deciding which strategy to use only once in the baseline phase. After training, which included two specific modeled lessons on explaining problem situations and strategies that can help solve those problems, both teachers increased their performance.

Cathy increased her performance from making only one statement about how to decide on a strategy in her baseline lessons to consistently sharing information about how to decide which strategies to use. To increase her performance even further, she needed to include specific text examples of when a problem arose while reading and how a strategy could help solve that particular problem. Kendra was not as consistent with her performance, but after training she did include *some* information about problem situations and how to use a strategy to assist with that problem, but needed to be more explicit

about specific problems and how to decide which strategy or strategies would help the most to solve that reading problem.

*How to Perform the Strategy: Baseline*

The final indicator in this category is sharing information about how to perform the strategy. Because comprehension strategies are thinking processes, it is difficult for some students to understand the mental processing steps good readers use as they employ strategies to help them solve reading problems. Good explanations include modeling of the mental steps that readers use while reading to help them make meaning. Explicit modeling includes the use of actual text materials being read, along with descriptions of the mental processes the teacher uses to apply strategies flexibly to help make meaning. If a teacher models procedures or rules, the lesson is not as strong as those that model mental steps because the strategies are metacognitive processes, not procedures to be followed.

*Cathy and Kendra's baseline results.* Cathy did not explain how to use strategies in any of her baseline lessons. Kendra's lessons included some explanation, but focused on procedural use of strategies (Table 4.4).

Table 4.4

*Ratings Analysis Results for Information Presented About How to Perform the Strategy*

Category and phase	Rating means (SD)	Rating median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0 (0)	0	0, 0, 0	No variability.
Training	1.75 (.43)	2	1, 2, 2, 2	Increase in means.  Increase from baseline.
Kendra				
Baseline	1.6 (.47)	2	2,1,2	Low variability.
Training	2.2 (.4)	2	2,2,3,2,2	Little change from  baseline.

*Kendra.* An example of Kendra's performance in a baseline lesson was Kendra's first lesson on figuring out the author's purpose. Kendra reviewed information about the strategy saying, "We've been talking all week about author's purpose and point of view. What were the three things about the purpose? Why would they write something?"

A student responded, "To entertain, to inform, and persuade."

Kendra responded, "To entertain, to inform, and persuade. And what does persuade mean?"

A student said, "Try to do something."

Kendra answered, “Try to get you to do something. Like try to get you to buy a car. And inform is just telling you about things. And entertain is telling you about their family, something to make you entertained like if you would be going to a movie to entertain you. We are going to figure out what the author’s purpose for writing this is and then we’re going to talk about the point of view. Remember their point of view is how they feel about what they’re writing about, and it gives us details.”

After this review, Kendra showed the students the story they were going to work with and their task. “We’re going to look for words that describe how she feels about her brother. Circle words that describe her brother.” Kendra shared declarative information about the strategy and stated the procedures to follow to “do” author’s purpose. She did not talk about the thinking involved to employ the strategy or how to apply the strategy to different texts.

*Baseline summary.* Cathy did not share any information about how to perform strategies during her baseline lessons. Kendra shared procedural use of the strategies by including the steps or procedures readers could use to “do” a strategy. Her descriptions used only procedures, with no information regarding the mental steps involved in using the strategies to help make meaning.

#### *How to Perform the Strategy: Results After Training*

*Cathy.* By the end of the study, Cathy had added information about how to perform strategies into her lessons. She did not share any information about this to her students prior to the TD sessions. After one TD session on being more explicit with

instruction, Cathy introduced visualization to the students using a quote that gives some clues as to what visualization is (quoted in the previous section, Informing the Students About the Strategy: Results after Training) and went on to share how to go about “doing” visualization saying, “So we want you to visualize or create mental or sensory images that trigger memories or feelings. So we are going to start by looking at what we’ve done before. Tell me what is culture.” After some discussion about a section of text about Christianity, Cathy tells more information about how to perform visualization, “So we have Christianity. What do you see in our community or wherever you go, that you know we have Christianity. So this is where I want you to visualize. What do you see? What do you hear to know that?”

Cathy told students the strategy focus, shared some information about it and asks them questions that get them thinking about how to perform the strategy (i.e. “What do you see? What do you hear to know that?”). Cathy did not model or demonstrate how to visualize, but she did give them some hints as to how they might question their thinking to come up with a visualization.

In her third lesson, after two training sessions, Cathy continued to add examples of how to perform the strategy, including the procedures or steps to follow to use the strategy. In this social studies lesson, the students read text material to get information for a research paper on a country. Cathy reviewed a procedure they used in a past lesson to gather important information, and shared how to use note cards to summarize information they gathered from resource material. Cathy said, “...Remember when we highlighted...we wrote little notes in our journal or you could write them on sticky notes.

Write them on anything. Well you are writing your notes on note cards....So each note card has separate information and writing summaries of your paragraphs is what you're doing. You are not going to read the entire encyclopedia article about your country. You are going to pick out the things that match your outline and that's why I have given you the outline. So you might have several steps to get where you need."

Cathy emphasized procedures to follow instead of mental steps to apply strategies. The visualization could have been stronger by adding information like this: the quote stated that we use pictures in our minds to help us figure out what is being read. As I read, I think about what is written and try to make a movie in my head about it. I come up with my own pictures using the words of the author as my guide. Cathy did include some information about procedures, but it is limited information. She did have students try to think of things they have seen about the topic (Christianity), but it was not a text example of using the words in the text to generate mental images.

*Kendra.* Kendra's performance showed slight change from her baseline lessons. She continued to share procedural methods to use strategies with little explanation of the metacognitive processes involved. In her first lesson, after one TD session, Kendra suggested using key words when using similes and metaphors to help understand what is read. Kendra explained, "We have been talking about similes and metaphors. If you run across a simile when you are reading, what words will you have read?"

A student responded, "As, like or but."

Kendra continued, "But metaphors are not that obvious. They compare something to another thing. We are going to do that a couple of times today, in our workbook and in

a project that we are going to do. We have a whale of a problem. If you have a whale of problem, is that problem little or small or big?”

A student answered, “Big.”

Kendra said, “It is big. So right here we have a big problem. Simile or metaphor?”

A student said, “Metaphor.”

Kendra responded, “Metaphor. Not using like or as, but still comparing things. Comparing the size of whale to the size of our problem.”

In this lesson, Kendra shared the procedures to follow to pick out the types of figurative language. She did not explain the mental processes involved in using the figurative language to make meaning of the reading, which was similar to her performance in baseline lessons. She consistently shared this type of information throughout the study.

#### *Summary of Performance for Information Presented About Strategies*

*Cathy's performance.* Overall, Cathy increased her performance from baseline lessons after training. In general, Cathy began to show changes after only one training. The training emphasized being explicit in the language used to teach students how to use strategies and included a modeled lesson on visualization. Cathy was able to use that information to add detail to her lesson presentations. Specifically, she introduced strategies in the context of the content material being read and explained specific situations where strategies could be useful.

She did not move beyond explanations of procedures into the mental processing involved in applying strategies, even after two more TD sessions that included a review

of videotaped lessons and more modeled strategies lessons emphasizing the use of mental steps to apply strategies to specific reading situations.

*Kendra's performance.* Kendra showed slight improvement in her performance. Her baseline lessons included some information about strategies already. After training, she continued to share some information about strategies, but never moved beyond the sharing of procedural usage, similar to Cathy. Once they both reached the point of sharing procedural information, they rarely moved beyond it. There were times in Kendra's lessons when she talked about how strategies could be useful, but for the most part she did not share much more information in her lessons after three TD sessions.

#### *Means to Present the Information*

In this category, lessons are rated based on the means the teacher uses to present information about strategies. The means of presentation are the introduction and closure of each lesson, teacher modeling of strategy use, shifting of instructional interaction from teacher regulation of the strategy to student regulation of the strategy, and the elicitations of student's verbalizations that demonstrate mental processing.

#### *Introduction of the Lesson: Baseline*

In a strong introduction, the teacher includes three components (a) an overview statement about the strategy that is to be learned, (b) the "real text" situation in which the strategy will be applied, and (c) what to attend to when using the strategy. Teachers should be as clear as possible in their explanations of the three components of the introduction so students have a clear understanding of the content and focus of the lesson.

Less explicit introductions include a combination of the components listed above but not all or there is an absence of the components listed.

*Cathy and Kendra's baseline lesson results.* In Cathy and Kendra's lessons, introductions in the baseline had few of the components of a strong lesson. After training their introductions included more information. Table 4.5 indicates their rating results.

Table 4.5

*Ratings Analysis Results for Means to Present the Information: Lesson Introduction*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.67 (.47)	1	0,1,1	Low variability.
Training	2 (1.33)	2	2,1,2,3	Increase from baseline. Trend begins to emerge after second lesson. Medium variability.
Kendra				
Baseline	1.6 (.94)	1	1,1,3	High variability.
Training	2 (.63)	2	1,2,2,2,3	Low variability. Increase in means. Upward trend.

*Cathy.* Cathy's introductions included what was to be learned with little to no elaboration, as shown in the following lesson introduction examples. The first is from a social studies lesson comparing landforms of Canada and the United States. The second is from another social studies lesson about immigration across the United States. (a) "Let's look at your Venn diagram. Let's organize this. This is from the United States and Canada. Let's start with the ones that are both in the United States and Canada. What did you list there?" (b) "So you're going to be looking at some things and how people were moving across the United States... Make sure you look at all of the pictures and all the diagrams and look at all of the headings as you go." In both lessons, Cathy told students the strategy (i.e. organization and using pictures and diagrams), but did not elaborate, explaining why or how to use the strategy using a "real text".

*Kendra.* Kendra's first two baseline lessons were similar. In her lessons, Kendra included the name of the strategy to be learned and some elaboration beyond that. An example is her first baseline lesson on author's purpose. Kendra said, "We've been talking all week about author's purpose and point of view. What were the three things about the purpose? Why would they write something?" Repeating a student response, Kendra said, "Entertain, to inform and persuade." In this introduction, there is some elaboration, but she does not explain why or how to figure out the author's purpose or point of view.

In her third baseline lesson on similes, Kendra did include more information in her introduction. Kendra began the lesson saying, "The last thing we are going to do is, tell me if you've done this in second grade already. Have you heard the word simile?"

We're going to look at similes. A simile is a kind of figurative language and that is something that compares one thing to another."

In the introduction, Kendra told the students the strategy, simile, and then explained why they would use the strategy saying, "It compares one thing to another."

*Baseline summary.* Cathy and Kendra included the strategy focus in all baseline lessons, but rarely added more detail about why or how to use the strategy with a real text. Kendra's last lesson in the baseline phase was one exception, but she did not use a real text example.

#### *Introduction of the Lesson: Results After Training*

*Cathy.* After the first training session, both Cathy and Kendra began to use more explanation about how or why to use the strategy in their introductions, but rarely used why, when and how together within the context of a real reading situation. The following example was one of Cathy's lessons, which included more detail. It was a social studies lesson on cultures and was after one training session.

Cathy said, "We are going to approach this one a little differently. I think this is something that you can visualize a little bit. What do I mean by visualize? What do you do when you visualize something?"

A student responded, "Like you think in your head what it looks like."

Cathy replied, "So you're visualizing it in your head."

Cathy included the name of the strategy – visualization - and asked students to share what they thought visualization meant. Although she did not use a real text situation as an example, she did involve the students in the discussion. There was limited

information beyond a definition. Information such as how and why to use the strategy would have increased the strength of the lesson.

After two TD sessions, Cathy's introduction to a social studies lesson included only a statement about what they were going to do. She was not specific as to the strategy focus (summarization). In this lesson, Cathy's class read a section of text and then used a chart to help them organize important information to generate a summary.

After the students read a section of text, Cathy said, "So I am just going to write notes down first. I'm going to kind of do this in two sections. I want you to do it with me."

Again, Cathy explained that she was going to show them how to do something, but she did not say the strategy. After the brief introduction, she moved right into explaining how to perform the strategy. She needed to be more specific about the strategy focus and how and why it would be important to help them summarize, then move into the demonstration of how to pick out important information in the text.

In her final lesson introduction, after three TD sessions, Cathy included a description about the prior knowledge strategy that showed how the students used the strategy in a science lesson, but did not include the name of the strategy. "On Friday, when we started talking about the six simple machines, most of you could name the six simple machines, and you knew a little bit about them because you had done them before right? So you have had some familiarity with this. One of the strategies that we have been talking about is the fact that sometimes I read things and I know a little bit about it. There's some familiar terms. Many times you read things in science and it's all new. I

have no idea what I'm talking about. So let me give you an example. On Friday when we talked simple machines, all of you had your hands up. You were all saying, 'I knew them'. You gave me examples. You were talking about that. So you are going to use this kind of strategy to understand what you are reading, when you know a little bit about it."

After training, Cathy's introductions included more information, but the types of information shared were not consistent across lessons. She shared mainly declarative information about the strategies, including the names of the strategies and what they are, why and how to use them, but did not share all of that information in all introductions or lessons.

*Kendra's results after training.* Kendra included more detail in her lessons after training, and she was consistent in the types of information she shared. In her first lesson after training, Kendra reviewed similes and then introduced metaphors. "We've been talking about similes and metaphors. If you run across a simile when you are reading, what words will you have read?" A student responded, "As, like or but."

Kendra continued, "But metaphors are not that obvious. They compare something to another thing. We are going to do a couple of things today, in our workbook and in a project that we are going to do. We have a whale of a problem if you have a whale of a problem is that problem little or big?"

A student responded, "Big."

Kendra said, "It is big. So right here we have a big problem. Simile or metaphor?"

Student, "Metaphor."

Kendra, “Metaphor. Not using like or as, but still comparing things. Comparing the size of a whale to the size of our problem.”

In this lesson introduction, Kendra included the name of the figurative language (i.e. metaphor) and explained what a metaphor is with an example. She did not include information about how or why to use the strategy. She did use an example, but it was not from an actual text that was read during the lesson, which would have increased the ability of students to see how figurative language works and is useful while reading.

After the second TD session, Kendra’s introduction included both what and how to use the strategy of summarization, but again did not include a real text example or why to use it. In this lesson, Kendra had the students read a newspaper article and pick out important details to be used in a summary of each paragraph. Kendra introduced the lesson saying, “I need you to divide your paper in half, down the middle. On one side write what’s important and on the other side write what’s interesting. When you make a summary you include the most important details to get you the summary.”

After three training sessions, Kendra increased her performance even more by including both why and how to use the strategy. She added an example, but it was not a real text example. “The page that I have copied for you, we are going to use to talk about drawing conclusions, and we’ve talked a lot about drawing conclusions before. Remember when you draw conclusions, the author does not tell you exactly what they want you to know. They give you lots of ideas and you are supposed to draw your own conclusions about what has happened, or what they want you to think. So think of some times where you have had to draw conclusions. Let’s think about recess. We have two

choices for recess. We can be inside or we can be outside. And without anybody telling us whether we are inside or outside we usually know. If it's raining outside, what's your conclusion? Where are we going to be for recess?"

A student responded, "Inside."

Kendra continued, "Inside. If it is a beautiful, sunny day...60 degrees, no rain, no snow, where are we going to be?"

Student, "Outside."

Kendra, "Outside and Mrs. K and Mrs. B didn't have to tell you that. You drew your own conclusion based off things you know, based off your experiences of what we have done in the past."

As mentioned previously, the example Kendra used about making inferences allows students to see how to infer in a real life situation. In order to increase the effectiveness of this lesson even further, she could use a text example to show how to infer. This enables students to see how the strategy is used when reading.

*Summary of results for Cathy and Kendra's lesson introductions.* After training, both teachers increased their abilities to add more detail to their introductions. In addition to stating the strategy focus, they both added either how or why to use the strategy, but not both, in all lessons after training consistently. There were times when Cathy added both why or how, however, it was not consistent in every lesson. After two training sessions, Kendra consistently added information about how and why to use the strategies, and after three training sessions added non-text examples.

*Modeling: Baseline*

For students to be able to use strategies on their own, they have to know what it looks like to use them. As mentioned previously, comprehension strategies are thinking processes that take place in the mind of the reader. Good teachers make their thinking visible for students. Modeling is one approach to making that thinking visible. When modeling strategies explicitly, the strongest lessons include teachers using real texts to model the mental steps involved in identifying a reading problem, selecting a strategy to help solve the problem and applying the strategy to that specific situation. For example, if a teacher were to model the use of visualization, they would read a section of text aloud to the students and explain their thinking. For example, in a text about a young man taking a long journey over vast, rolling hills the teacher might say something like this, “In this section of text that I read, the author used the words, vast, rolling hills. I was not sure how that connected with the rest of the story, so I got a picture in my mind of the hills near my house that go on and on, going up and down. It really helped me understand more about the place the character was located and how the hills might affect his long journey.”

For this indicator, lower performing lessons include only explanations of procedures or rules, not the mental steps used when making meaning of the text. Additionally, lower performances include examples of the strategy that are not based on text material.

Cathy and Kendra's scores showed an increase in performance (Table 4.6). Cathy's performance was more consistent after training than was Kendra's, and Cathy showed more growth from the baseline in this indicator.

Table 4.6

*Ratings Analysis Results for Means to Present the Information: Modeling*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0 (0)	0	0,0,0	Low variability. Trend.
Training	1.75 (.43)	2	1,2,2,2	Increase from baseline. Upward trend. Low variability.
Kendra				
Baseline	0.67 (.94)	0	0,0,2	Medium variability.
Training	1.4 (1.5)	1	0,0,4,1,2	High variability. Increase in means.

*Cathy and Kendra's baseline lesson results.* During baseline lessons, there was a total absence of modeling for Cathy. There was one lesson when Kendra included modeling of strategy use. During Kendra's lesson, she shared a non-text example of a

simile and then explained what the simile meant in her own words. “So we’re going to look for similes. Now when you look for similes you can look for clue words, like or as. When I gave my example her heart is as big as a whale’s heart, or a raindrop is like a summer’s day, you would think, okay, I hear like, so this is a simile. But you get the feeling that she has a really big heart, right? If somebody says that your heart’s as big as a whale’s, even though it can’t be. But if you’re describing it, you’re comparing it to a whale’s heart, then you’re saying that they have a really big heart and they care a lot about other people.”

In this example, she modeled her thinking, however, she did not explain what she was doing. At first, she used a procedure to find the simile (i.e. “you think, okay, I hear like, so this is a simile”), and moved to an explanation of figuring out what the simile meant (i.e. “But you get the feeling that she has a really big heart, right?”). Her explanation included some description of the mental steps used to understand the simile, but it was not explicit. In order to model even more explicitly she could have added, “I gave the example her heart is as big as a whale’s heart. Let me explain how I figured out what that means. It is a little confusing. When I read through it, I noticed the word like and I knew that like is a comparing word, or simile. The simile helped me understand that the author is comparing the character’s heart to a whale’s heart. I also thought that the author was not comparing the actual size of her heart because that wouldn’t make sense with everything else I know about the story, so I got the feeling that they were trying to explain the character’s personality. I know that when people talk about someone having a

big heart, they mean they are nice. So in the end, I decided that this sentence means that the author wants us to think that this person is really nice.”

*Baseline summary.* In review, Cathy’s baseline lessons included no modeling of strategy use. Kendra used modeling in one strategy baseline lesson. In that lesson she demonstrated the usage of procedures when “doing” strategies, but did not show the mental processes used when employing the strategy, like the example shared after that lesson excerpt.

*Modeling: Results After Training*

*Cathy.* After the first training, there was still little evidence of modeling in Cathy’s lessons. After two training sessions involving discussion and videotape analysis around explicit explanation of how modeling could look in lessons, Cathy started to model procedural use of strategies. An example was a lesson right after the second training session. Cathy taught a social studies lesson on New York City using summarization as a way to take notes. During the lesson she modeled how to pick out important details in order to generate a summary. “One of the things that comes out to me right away of course we’re talking New York City, so I would write New York City. And the first word that kind of pops out to me is crowded, so this paragraph is talking about New York City and one of the first things I notice, the word crowded... I am going to write this into a sentence. In New York City it is very crowded. People use subways, buses, taxis, cars and ferry boats to move around the city.... So does this kind of summarize what this first paragraph is telling us? It is talking about New York City, and I’m picking just the key words.”

Cathy used modeling several times during the lesson. In the first sentence, “One of the things that comes out to me right away of course we’re talking New York City, so I would write New York City,” Cathy used her thinking to show the students the words she picked out, and where she would put those words in her notes. She used modeling again in a later sentence, “And the first word that kind of pops out to me is crowded, so this paragraph is talking about New York City and one of the first things I notice, the word crowded... I am going to write this into a sentence.” Again, she modeled the procedure of finding the important words and putting them in her notes. In this lesson, Cathy did not model the mental steps it took to decide what was important and what was not. This would have increased the explicitness of the lesson. In a later lesson, she continued the same type of procedural modeling.

This following modeling excerpt is from Cathy’s second to last lesson. It was a social studies lesson on determining important information in the textbook. “I am going to tell you what to highlight. So if I was doing this, this is what I would highlight. Canada covers most of the northern half of North America. It borders Alaska on the northwest, the rest of the continental United States to the southeast, and to the west extends 3223 miles ... then go down several lines and I would highlight, has six time zones. About the sixth line it starts. Now that’s all I would highlight.” Consistent with the other lesson, Cathy modeled procedural use of summarization by showing the students the words she would highlight, however, she did not model the mental steps she used to decide what was important and what was not.

*Kendra.* Kendra's results for her performance in modeling after training were not as consistent as Cathy's. She did not model in a lesson until after the second training. During that lesson, Kendra's modeling was exemplary, however, she did not model as consistently in the last two lessons of the study.

Kendra's exemplary lesson was on summarization where students picked out important and interesting information from a newspaper article and used the important information to generate a summary. Kendra read the first section of the article and demonstrated her thinking when figuring out what was important and what was interesting. "In this paragraph, because we haven't read the whole thing yet, this might just be interesting. *Touch of Color*. And when I read it I thought, coming soon, that's pretty interesting, might not be important but it's, I think that it's interesting. It's like a movie, coming to a theater near you. Coming to a cash register near you, a new five-dollar bill with a touch of color. When I read this paragraph, what I thought was important was the Federal Reserve...I thought the Federal Reserve was important because they're the ones that make money. And without them, we would not have an article about the five-dollar bill, so I thought the Federal Reserve, the people who make money, was an important part of this paragraph. They supply us with our money."

Kendra included specific passages that were interesting in a real text situation (i.e. "When I read this paragraph, what I thought was important was the Federal Reserve"), and included the mental steps it took to determine what was important (i.e. "I thought the Federal Reserve was important because they're the ones that make money.")

In her next lesson, Kendra's modeling was not as explicit. In this lesson, the students worked in groups to find the main idea in a passage. The students read a story as a class, got into groups, and Kendra shared the directions. "Help your group come up with the main idea, what this is mostly about, and four details that tell me more about the main idea. I need factual details. What's a fact?"

A student responded, "Something that's true."

Kendra continued, "Something that's true. Something you can prove. Go to work. Main idea and supporting details. The main idea of the story."

In this lesson, Kendra talked minimally about main idea in terms of procedures used to find the facts or things that could be proven. She did not model the thinking involved to determine a fact, she gave them the direction and had them begin. Again, she focuses her instructions on the procedures of finding the main idea and supporting details rather than a quick review of the mental steps involved in figuring out the main ideas and supporting details.

In her final lesson on drawing conclusions, Kendra began to model a conclusion she drew from a personal experience. Instead of modeling her thinking, she asked the students what she should do. "If I thought of one [a time she drew a conclusion] for myself, it's Friday that I am supposed to have my lesson plans done for the next week, and I only have half of my lesson plans done. What conclusion can I draw? It's Friday morning. What do I need to work on Friday?"

A student responded, "Your lesson plans."

Kendra continued, “To get them done, because I know that if I don’t get them copied and sent over, then he [the superintendent] might come ask me about them to call me about them, and it’s my job to get my lesson plans over there on Fridays.”

In this lesson, Kendra gave them a scenario to think about, however it was not a text example and did not include any modeling of her thinking.

*Summary of results for Cathy and Kendra’s lesson introductions.* Because there was an absence of modeling in many of the strategies lessons, the TD sessions included much information about how to model strategy usage, especially the second and third session. This information was not easily transferred to classroom practice for either Cathy or Kendra. Cathy increased her performance from the baseline by adding times in her lessons when she modeled procedural use of the strategies. She consistently modeled procedures however and never modeled the thinking involved in using the strategies. Overall, Kendra showed improvement in how she modeled strategies to her students, but her performance was inconsistent. After training she had two lessons with an absence of modeling. Her next lesson included modeling resulting in the highest rating of any lesson in the study, and then ended the study with less explicit modeling again.

#### *Shifting from Teacher Regulation to Student Regulation: Baseline*

As students begin to use the strategies the teacher should plan for student practice with the strategies within a scaffolded learning environment. As students practice, the teacher can monitor their progress and scaffold practice with feedback to enable students to use the strategies more effectively. The ultimate goal is to shift regulation of the strategy from the teacher to the student. In order to shift the instructional interaction from

teacher regulation of the strategy to student control of the strategy, the teacher provides a series of trials characterized by increased students' mental processing. The teacher includes assistance early in the lesson, including teacher monitoring of students' mental processing and making reference to student responses in asking for subsequent responses. In lessons with little explicitness, teachers give little guided practice or when practice is given, the students are given practice in finding right answers, not on the mental processes used to understand what is read.

*Cathy and Kendra's baseline lesson results.* Cathy's ratings (Table 4.7) indicated she improved her instructional performance from the baseline in her ability to shift instructional interactions. Kendra showed no growth in her performance on this indicator, however, her baseline scores of 2's indicate that she already used some shifting of responsibility in her lessons.

Table 4.7

*Ratings Analysis Results for Means to Present the Information: Shifting Instructional Interaction*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.67 (.47)	1	1,1,0	Low variability.
Training	2 (0)	2	2,2,2,2	Increase from baseline. Increase in means.
Kendra				
Baseline	2 (0)	2	2,2,2	No variability.
Training	1.8 (.4)	2	1,2,2,2,2	Low variability. Little change in means.

*Cathy.* During baseline lessons, Cathy consistently asked students to utilize strategies in order to find answers. In her first baseline lesson on the impacts climate has on people, Cathy shifted instruction from a discussion to directions for seatwork. “So you’re going to read about climate and vegetation. On the guided reading sheet that you were given, we’re going to take most of our notes, and we’re going to do this a little different. You’re going to read, take your notes, do your key terms and then we are actually going to go through the notes and do the back of the worksheet. So this way I

know you are reading it, and you're going to fill out the worksheets. So if you look at your worksheet, climates of Canada, just give me summaries of the climates of Canada and of the United States. So you would be wanting to look at the headings, those subheadings. Now 3, 4, 5 and 6 they talk about four vegetation zones so it's kind of like groups where vegetation is grown. One is tundra, one is grassland, one is desert scrub and one is forest. So just put a few notes in there and that is what we are actually going to be talking most of our notes today. Use pencil please, so that you can change and add things to it. And then you have your key terms you can fill in at the bottom. Any questions right now? I am going to give you about ten minutes to complete this and then we are going to start our notes, so do your worksheet, your key terms and your reading."

In this lesson, Cathy shifted instructional interaction from herself to the students by having students read the text, looking for answers to questions found on worksheets. She included suggestions for how to find the answers, (i.e. So you would be wanting to look at the headings, those subheadings). In order to increase her ratings, she needed to ask students to explain their thinking as to how to find answers and/or offer any guidance as to how to use strategies to help them understand what they read.

*Kendra.* Kendra's baseline lessons included time for student practice as well. The lessons followed a consistent pattern of activities. Kendra introduced the strategy lesson first, then the class read a story which had been laminated and put on a chart at the front of the room. After the reading, students used different colored markers to find and mark evidence of a strategy in the story using the laminated story at the front of the room. Here

is an example of the interaction that took place after the students read the story. The lesson focus was the author's point of view.

Kendra said, "It informs us a little bit about her big brother, okay, it also entertains, so let's first do how we know it's informing us and entertaining us about the brother. We're going to look for words that describe how she feels about her brother. (Handed a marker to a student). Circle words that describe her brother. (The student walked up to the story and circled a word.) Kendra said, "Okay, when he laughs he laughs sweetly. (The student handed the marker to another student.)

Kendra said, "What else describes her brother?" (The student pointed to some words and looked at Kendra.) Kendra responded, "Who's running? (The student did not respond.) But does that describe what sort of person that he is? Look for words that describe what kind of person he is." (Kendra erased the circles.) She continued, "What kind of person is she informing us that Artero is?" (The student pointed to another word). Kendra said, "She's asking for help, but there's something in that sentence that tells us what kind, how she feels about her brother." (The student pointed to some words and circled one). Kendra continued, "She thinks he's big and strong. She feels safe with him."

(The student passed off the marker and a new student went to the story and looked at it. The student pointed to a word.) Kendra said, "That kind of already tells us that he's big and strong, but there's something else in that sentence that tells us about Artero, what kind of person he is." (The student circled the word sympathetic.)

Another student asked, "What's sympathetic?"

Kendra answered, “That means he takes her feelings into consideration. He feels what she’s feeling. Because he’s sympathetic. He takes her feelings into consideration. He knows she’s afraid of the fire ants, so he’s helping her. What else describes Artero? There’s a couple more things we can look for. (The student passed the marker to another student. The other student went up to the story and marked some words.)

Kendra said, “He’s a hero. She thinks her big brother is a hero. He heroically saved her from these ants. Ant there’s one other word that describes her big brother.” (The students traded markers. The student looked at the story.) Kendra asked, “What kind of person does she think he is?” (The student pointed to some words.) Kendra said, “Nope that’s something she’s doing. Look up at the top. Artero is a what kind of person?” (Student continued to look). Kendra said, “She counts on him forever, to protect her.” (The student pointed to a different word.) “Nope that’s how the ants are crawling.” (The student pointed to another word.) Kendra said, “She can count on him. He is dependable.”

Kendra finished this section of the lesson saying, “Okay, so we have some words up here that tell us more about the author’s purpose. She’s informing us about her big brother, she’s telling us that her big brother is dependable, he’s big and strong, he’s sympathetic to her feelings, he’s sweet, and he’s her hero.”

In this lesson, Kendra shifted the instructional interaction from herself to the students by allowing them practice with the strategy with feedback when they marked different parts of the text. After students marked the text, Kendra explained her reasoning as to why the student may have marked that particular section of text. She did not ask the

students how they figured out which words or sentences to mark. If she had asked the students their thinking, she would have given them more guided practice in using mental steps, making the lesson more explicit.

Like Cathy, Kendra focused on finding correct answers, or words, in the passage, instead of allowing the students to explain their thinking. She emphasized finding certain words or phrases in the passages. The focus was on procedures rather than metacognition of strategy use.

*Baseline summary.* During baseline lessons, Cathy consistently had students read text passages to find answers for worksheets or other written activities. She did not have students practice or explain how they used strategies to help them read the texts. Kendra did include practice of strategy use by individual students, but the practice emphasized procedures and rules, not mental processes.

*Shifting from Teacher Regulation to Student Regulation: Results After Training*

*Cathy.* After training that included teachers being involved in activities that demonstrated the shift of responsibility, Cathy continued to have students find correct answers as a part of each lesson, however, she added time for students to practice strategies to help them understand concepts as they read text or resources for reports. Her lessons consistently included this type of instructional interaction.

Cathy sequenced her lessons starting in a whole group, teacher directed format, moving to partner activities and then working individually. This sequence of instruction demonstrated higher instructional performance on this indicator because she gradually

shifted the practice of skills from the teacher to the students with some time for guided practice in between.

After the first training, one of Cathy's lessons exemplified the type of instructional sequence and interactions she used throughout the study. In this lesson on cultures, Cathy used visualization to help students build images in their minds about their culture. They read a section of text about holidays, and Cathy introduced the activity.

"Then they are giving you some examples, but we are going to stop right there now, so holidays. So within your group right now, I want you to pick a holiday, just one in each group, so if you come up with some of the same that's fine. Pick a holiday, and then I want you to picture some things and visualize some of the things that are associated with that holiday and think about what we did with our posters for our Christmas Around the World, with that culture. So think about things that would be related to a holiday, and then we're going to make some inferences about that. So first of all, each person pick a holiday right now and write it down. Okay, write it down and then give me a few facts that we know about that holiday. So think about in your mind, things related to that. (The students talked and wrote.)

Cathy said, "Whatever you can think of. Anything related to it just like we did with religion. Doesn't make any difference what holiday, it doesn't make a difference, we are just going to go around, you don't have to write each other's holidays down. Let's start with group one. What holiday did you guys pick?"

The group responded, "Fourth of July."

Cathy said, "Okay, so what things do you see that are... Oh I can think of lots of things I can see, smell even associated with Fourth of July. So what did you come up with? What did you write down?"

A student said, "It resembles your independence."

Cathy continued, "Okay, what are some things that you know that are associated with Fourth of July that you can see or feel or hear or touch?"

A student in another group said, "Fireworks."

Cathy said, "Fireworks. Now I can hear them but I can see them and I can also smell them can't you? So fireworks. Anything else with Fourth of July?"

Another student said, "Parades."

Cathy responded, "Parades, sometimes there's parades with Fourth of July. Can you visualize a parade right now?"

Several students said, "Yeah."

Cathy asked, "Did anyone else do Fourth of July?"

A group said, "Yes."

Cathy said, "So what else did you come up with to see?"

A student said, "Flags."

Cathy said, "Flags. All right, so a lot of times there's more flags. What else?"

A student said, "Food."

Cathy responded, "Food. Of course, we all eat on the Fourth of July. Sometimes, but don't you a lot, of times you have food, and you know you have over to your house,

you go to somebody else's, either families or friends? And you go to other people's houses or you go someplace and see the fireworks?"

A student said, "Yeah parties."

Cathy responded, "Yeah, celebrations. What colors do you visualize?"

Several students said, "Red, blue and white."

Cathy said, "Yeah, we just automatically, but that's Fourth of July isn't it? Okay, another holiday. Which one did you do?"

In this lesson Cathy had the students visualize different aspects of a holiday. They did the thinking within a group, evidence of a shifting of instructional interaction from the teacher to the student. Throughout the discussion, Cathy had students say their answers, however, she did not have the students answer how or why they came to the answers. Cathy explained the answers that the students gave after they shared them. If she had asked the students to explain their thinking, her instructional performance would have increased in this area, and the students would have had the opportunity to practice metacognitive thinking in a scaffolded environment.

*Kendra.* There was little change in the types of interaction Kendra demonstrated in her lessons after training. The only difference evidenced in her lessons was the activities she included. During baseline, comprehension lessons followed the same pattern mentioned previously. After training, Kendra sequenced activities differently. Instead of having students individually walk across the room to a story and mark specific words or phrases in the passage, Kendra used several different methods of practice. Here are some examples.

After two training sessions, in a lesson on fact and opinion, the students created their own chart to document their ideas. The lesson began with the whole group reading a story together sentence by sentence, determining if the sentence was a fact or opinion. Later on in the lesson, Kendra had the students make a chart with the headings fact and opinion. The students read through sentences as a group and then individually decided whether the statement was a fact or opinion and wrote the sentence under the proper heading. The following instructional sequence evidences Kendra's change in her instructional interaction after training.

“All right, this time you are going to make your own choice. Is that a fact, something you can prove, or is it someone's opinion?”

A student asked, “What?”

Kendra asked, “Would you like me to read it again? We go to the park to practice Goldie's tricks. Is that something that you can prove, or something that is someone's opinion, how they feel about it. What they think?”

A student asked, “Do we just write it under fact or opinion?”

Kendra answered, “Yes, wherever that would go. You put it where you think it should go. Can you prove that they do that? And that's why they are going, or is that someone's opinion? Write it on your paper where you think it would go.”

A different student said, “I am getting confused.”

Kendra said, “You are, huh? Is that something that if you were watching you could prove or is that something that if you were watching would be your opinion? Where did you put it?”

The student responded, “Fact.”

Kendra said, “As a fact? [Student name], what do you think? Did you put it under fact or opinion?”

The student responded, “Fact.”

Kendra said, “Fact? [Student name], where did you put it?”

The student answered, “Fact.”

Kendra said, “All right, [Student name]?”

The student answered, “Fact.”

Kendra continued, “It is a fact. You could go and watch them and if that’s what they are doing every day, that is a fact. What color am I using for fact...red. They are there to practice Goldie’s tricks. They go to the park and that’s what they do while they are there.”

A student said, “The way I remember that is the first line, Goldie is the best dog ever is an opinion.”

Kendra said, “Okay. And did you put it under fact or opinion?”

The student responded, “Opinion.”

Kendra said, “It is a fact. That’s why they go there, to practice their tricks. So if you wrote it under opinion just leave it and draw a line to fact. You don’t have to re..”

A student interrupts, “It is something you can see.”

Kendra replied, “Yes. A fact is something you can see and prove.”

In this lesson, Kendra had the students practice in a whole group, then individually decide whether the sentences were facts or opinions. Throughout the lesson,

the emphasis was on the procedural use of the strategy of differentiating between fact and opinion. In order to increase her performance further, Kendra would need to include the mental steps involved in determining whether a statement was fact or opinion. Kendra would also need to include opportunities for students to share their own thinking. There were two times when students offered their thinking on their own (i.e. “The way I remember that is the first line, Goldie is the best dog ever, is an opinion, “ and “It is something you can see.”), however, Kendra shifted the attention from their thinking back to determining if the sentence was a fact or opinion. In order to increase her performance, Kendra would need to have students explain their reasoning in determining whether the sentence was a fact and opinion, emphasizing the thinking, not the procedural use of the strategy.

*Summary of results for Cathy and Kendra’s lesson for shifting instruction interaction from the teacher to the student.* Cathy increased her performance slightly in shifting interaction. After training, she included students in activities that allowed them practice as small groups instead of whole group practice. Kendra did not change her instructional practices in this category. She did change the procedures of the classroom, allowing different types of practices, but continued to have students practice strategies as procedures. Both teachers focused on procedural use of the strategy and neither teacher asked students to explain their thinking while applying the strategies.

*Elicits Verbalization of Mental Steps: Baseline*

While students practice strategy use, another component of the lesson should be the elicitation of students’ mental processing steps. Teachers ask students to explain their

thinking, making the students' thinking clear to the teacher and to the student. This information can help guide and scaffold instruction. In order to have strong performances in eliciting verbalization of mental steps, teachers require students to explain all the mental steps used when applying the strategy. The focus is on mental steps, not procedures or rules used when working with strategies. If the teacher focuses on procedures or does not ask students to explain their thinking, they demonstrated lower performance.

*Cathy and Kendra's baseline lesson results:* Neither Cathy nor Kendra showed growth in this indicator (Table 4.8).

Table 4.8

*Ratings Analysis Results for Means to Present the Information: Eliciting Student**Verbalizations*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.67 (.47)	1	1,1,0	Low variability
Training	1 (0)	1	1,1,1,1	Little growth  Consistent ratings
Kendra				
Baseline	2 (.82)	2	3,1,2	High variability
Training	1.6 (.49)	2	1,1,2,2,2	Decrease in means  Slight decrease in base  Upward trend

*Cathy.* Results in the baseline phase for Cathy indicate that she elicited responses from students but did not have them explain how they got their answers. The following lesson example illustrates the types of elicitations Cathy used in her lessons. In this social studies lesson, students were asked to find the important details about the natural resources found in the United States. They had previously read the section of text about natural resources. Cathy said, “Turn over to your side that has the United States. Instead

of making lists or writing in your journals, we are going to do it this way. For the United States, give me one category for natural resources.”

A student said, “Soil.”

Cathy responded, “What is soil?”

The student replied, “Fertile soil.”

Cathy said, “If you just put soil, that’s fine, but let’s put the fertile soil. Please spell it correctly. So tell me what is soil? What’s the difference between soil and fertile soil?”

A student said, “Fertile soil is really rich and it has lots of nutrients in it.”

Cathy said, “So, because we have lots of fertile soil, where do we have that fertile soil? Think of our lesson yesterday, where do we find a lot that fertile soil?”

A student responded, “Around in our areas.”

Cathy said, “And we’re called the...?”

The student said, “The plains.”

Cathy replied, “The Great Plains, central plains. So any other place that we have mentioned. We touched on it a little yesterday, where would we find lots of fertile soil that isn’t in a big region like we talked about yesterday?”

Throughout this lesson, Cathy asked students questions, eliciting correct answers. As the students supplied answers, Cathy asked more questions to get closer to the answer she wanted. This is exemplified at the beginning of the lesson when the student gave his answer of soil, and Cathy asked what type of soil. During her baseline lessons, Cathy did not ask students to explain their thinking.

*Kendra.* Kendra's performance was not as consistent during the baseline phase as Cathy's. In her first baseline lesson on point of view, Kendra asked students to think about the author's point of view by underlining words or phrases in a story. The class read the section of text first, then Kendra said, "What are some words or phrases in here that tell us she's afraid of fire ants? You can underline them."

The student said, "There's lots."

Kendra said, "There's quite a few that tell us what she's feeling. What she's doing because she's afraid of those ants. How do you know that she's afraid of them?" (A student looks at the story and points to some words). Kendra said, "How do we know that she's afraid of them?" (The student underlined some words).

Kendra said, "She's screaming. She screamed with panic. Okay. She's panicking. She does not like them. How else do we know that she does not like fire ants?" (The student that underlined the first set of words handed the marker to another student. The student went to the story and looked.)

Kendra said, "She screams with panic. What else? If we were looking at this picture, what else would you use that she's afraid of fire ants?" (The student continued to look at the story, not marking anything.) Kendra continued, "If this was part of a movie, how would we know that she was afraid of fire ants?" (The student continued to look at the story, not marking anything.) Kendra said, "She screamed, then what did she do?" How is she standing? She's up on her tiptoes up on a rock, trying to get away from them. That tells me she's afraid of them. She doesn't want them touching her." (The student underlined the words.)

In this example, Kendra does ask students to think about why a character may feel a certain way by underlining the words or phrases that “show” them the feelings. She did not ask them why they chose the words they did. The students found correct answers and were not asked to explain the thinking involved in deciding on those answers.

In the last baseline lesson, Kendra asked for students to tell her the answers to questions and did not ask them to explain their thinking. This lesson focused on simile and metaphor. The students read the passage as a group and then went to the story on a chart at the front of the room with a marker to mark similes or metaphors. Kendra said, “This passage is full of similes. Remember, we’re looking for the key words as or like, and they’re giving us strong emotion about how to feel about something.” Kendra reads, “ ‘It’s too hot to play outside Karman, my mother yelled from the porch.’ Any similes in there?”

A student responded, “No.”

Kendra read on, “ ‘You’re as carefree as a horny toad at high noon.’ Tell me what it is.”

The student said, “Carefree.”

Kendra replied, “It’s a phrase, so carefree what?”

The student said, “Carefree as a horny toad at high noon.”

Kendra said, “ ‘You’re as carefree as a horny toad.’ What are the key words?”

The student said, “As.”

Kendra said, “As.”

In this lesson, Kendra helped them figure out the simile in the sentence, but only

asked for the answer, not the thinking involved in finding that answer or what the simile meant.

*Baseline summary.* Cathy's baseline lessons included student elicitation of answers to questions. She did not however ask students to state how they knew an answer or explain the mental steps involved in figuring out the answer, which would generate metacognitive thinking about the passage read. Kendra included some elicitation of responses from students that asked for how they arrived at an answer, however it was not consistent across the baseline lessons.

*Elicits Verbalization of Mental Steps: Results After Training*

*Cathy.* Cathy showed no change in her performance in regard to eliciting verbalizations of mental steps, even after discussion, practice and reflection of videotaped lessons with examples. After two TD sessions, Cathy's elicitation continued to focus on correct answers. This lesson segment came from the last lesson of the study. Cathy talked about the prior knowledge strategy and asked the students to think about the information they already knew about the six simple machines.

Cathy said, "So give me some information you know already about the machines. What do we know about the six simple machines? Give me some of the things we shared on Friday."

A student said, "They help you do work."

Cathy said, "They help us do work. What else do we know?"

Another student said, "It doesn't take as much force."

Cathy replied, “Because it helps us do something we couldn’t do very easily without the machine, right? Do you remember the names of the machines? Let’s just think if we can remember the names of them. You may not remember all six. You may not have them all memorized, but give me the name of a machine.”

A student said, “A lever.”

Cathy said, “Okay, a lever is the name of a machine. Give me another one.”

A student said, “Pulley.”

Cathy replied, “Pulley.”

Another student said, “Wheel and axle.”

Cathy said, “Wheel and axle.”

Another student said, “A fulcrum.”

Cathy stated, “Is that the name of a machine though? We’re just talking about the machines. And you haven’t read about all of them yet. We’re just seeing if you remember them.”

In this example, Cathy asked students for correct answers. She did not ask them to give the reasoning behind how they figured out the answers. The activity also did not talk about how the strategy of prior knowledge helped them to understand the reading.

*Kendra.* Kendra’s lessons right after training did not include any elicitations of students’ verbalization of mental steps. She asked them questions about the readings, expecting students to find the correct answers. After the third TD session, Kendra asked students to explain their thinking a few times during each lesson. In the following example, during a lesson on main idea and supporting details, Kendra had the students

pick out supporting details and make a main idea statement based on those supporting details. The students worked in groups. Kendra asked each group to share the supporting ideas they found in the passage saying, “What was your main idea statement?”

A student responded, “Going hungry, running out of food and koalas.”

Kendra said, “Going hungry, running out of food, koalas, rescuers, saving. Okay, now in your group, how did you know that that was the main idea?”

A student said, “Because this whole story, because the title is The Koala Catchers, and from there I thought that it should be about koalas.”

Kendra replied, “So right away from the title we already know, when you read the title, you already know that this is going to be about koalas, and the title leads you to believe that the koalas are getting caught, right? Who are the people doing the catching?”

A student said, “Rescuers.”

Kendra said, “The rescuers. Why are they doing that?”

A student said, “To save them. Running out of food.”

For the most part, Kendra asked students to give their answers with no explanation, but in this lesson she demonstrated one example of eliciting a response about their thinking. This would have to become a more prominent part of her lessons in order to show more improvement in this indicator.

*Summary of results for Cathy and Kendra’s eliciting of student responses.* Neither Cathy nor Kendra increased their performance in their ability to elicit student’s responses that included verbalization of mental steps. Throughout the study they emphasized correct answers. If teachers elicit student verbalization of the mental steps they are using

to determine answers or use strategies, the students become more metacognitive about their reading. Additionally, the teacher can “see” what the student is thinking and be able to scaffold instruction based on the student responses. This type of information was rarely elicited even after three TD sessions that included the demonstration and practice of that aspect of strategy use and practice.

*Closure: Baseline*

Similar to the introduction, the closing of a lesson is important because it brings everything that has been taught and practiced back into clear focus for the learner. Based on the rubric there are a few indicators of a strong conclusion to a lesson. Strong conclusions can (a) include students in summarizing and/or reviewing the lesson and/or (b) include a demonstration of using the skill strategically in connected text with a reminder that it is in such connected text that the strategy will be used. Lesser performances include no evidence of closure, a statement that the lesson is finished, or a summary statement that includes either what, why or how, but not all three.

*Cathy and Kendra’s baseline results.* Cathy and Kendra were consistent in their baseline lessons (Table 4.9). They tended to bring closure to the lesson, but did not summarize the strategy that was learned.

Table 4.9

*Ratings Analysis Results for Means to Present the Information: Closure*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0.67 (.47)	1	1,1,0	Low variability
Training	2 (.71)	2	2,3,2,1	Increase from baseline Increase in means High variability No trend
Kendra				
Baseline	0.67 (.47)	1	1,1,0	Low variability
Training	1.8 (.98)	2	0,2,2,2,3	Increase in means Increase in baseline Upward trend

*Cathy.* An example of Cathy's performance is from a science lesson on the climate of Canada and the United States. The students finished a discussion on the differences between the country's climates and were about ready to begin an assignment. To close the instructional section of the lesson Cathy said, "So just put a few notes in

there and that is what we are actually going to be taking most of our notes today. Use pencil please, so that you can change and add things to it. And then you have your key terms you can fill in at the bottom. Any questions right now? I am going to give you about ten minutes to complete this and then we are going to start our notes, so do your worksheet, your key terms and your reading.” Cathy summarized the assignment to be completed, but did not mention the strategies they used throughout the lesson. Including information about the strategy that was presented in the concluding statements of a lesson brings the focus and attention back to the key concepts the students learned and should remember.

*Kendra.* Kendra’s baseline lessons were similar. Most of her closing comments were short sentences. The following lesson example illustrates Kendra’s closure during the baseline. The focus of the lesson was simile and metaphor. The class finished finding and discussing similes and metaphors and were about to start their practice in a workbook. Kendra closed the lesson saying, “Let’s get out our reading workbook. We have a couple of pages to do. They are both up there (Kendra pointed to the board where the page numbers were written).” She told them what materials they needed, but did not summarize the strategy that was learned or practiced. As mentioned in Cathy’s results, it is important to summarize the key concepts learned in a lesson to highlight those concepts that should be remembered and learned.

*Baseline summary.* Generally, during baseline lessons Cathy and Kendra closed lessons with a simple statement that the lesson was over and in some cases did not mention that the lesson was complete, just moved on to another activity. There was no

conclusion statement about the strategy focus and how, why or when to use the particular strategy which would have brought the lessons to a focused end.

*Closure: Results After Training*

*Cathy.* After training, Cathy added more detail to her conclusions. She summarized the assignment and added a statement about the strategy that was emphasized. After two TD sessions, Cathy closed a social studies lesson this way, “At the beginning, what I was having you doing was called visualization. And so if you’ve never been there it’s hard to picture, but we’ve all been in our home communities. It is hard to picture kind of what New York is like, but you could picture what Omaha’s like. Some of you have been to cities like San Francisco, Disney World. Some of you have been there, so you’ve been to some large cities, and it gives you an idea of what it’s like. Remember, my friend that moved from San Diego to Omaha, she came to Omaha and said, ‘Oh it’s so nice to be in a quiet city. With less traffic.’ That was her comment when she came from San Diego. Now we wouldn’t say that. But compared to San Diego, it was to her.”

Cathy begins the closing of her lesson with a review of the strategy focus and how she had introduced it to them. She then moves on to explain how they can use the strategy to help them summarize information they will read, saying: “Put as many, just like we did on the overhead, just as many details as you can put down, the key words. Now if you were highlighting it, if this were your textbook. So if you go to college and you have your own textbook and you buy your own, so you can highlight in it, that’s how you would highlight. You’re not going to highlight the whole sentence. You’re going to highlight those key words and those main ideas. So it’s a technique you’re going to use as you go

through junior high and high school so that's why I emphasize it now so you know how to do it."

The summary statement about the strategy focus showed an increase in her performance from her baseline lesson. One area for improvement would be to include students in summarizing what, why and how to use the strategy and how it is relevant to them.

Other lessons after training were not as strong as the lesson just shared. In the last two lessons of the study, she did not summarize the strategy as well and in the last lesson, she summarized the assignment only, excluding a summary of the strategy focus. The following statement is from her last lesson in social studies emphasizing main ideas used in reading texts for a research project. Cathy said, "So as you're reading your new assignment, fill in some of those main details. Do it in this form, because you will and again it takes up some pages, you're only going to get one or two on a page because I want them to match. So don't line them up. Line them up so you start with the new machine. So just write a few ideas down and you just have to repeat the other four machines. What you know about them, something you know. If this list is kind of short, that's okay. Then put more things over here. And again, just the main ideas on each one."

There was no comment about how main ideas could be helpful or when or how to use the strategy. She did summarize the directions, but did review the strategy that was emphasized throughout the lesson.

*Kendra.* Kendra demonstrated improvement in her ability to bring closure to lessons after two training sessions. In the lesson after the first training session, Kendra

said that it was time to go to the next activity, making no summary of the activity or strategy. After two training sessions, Kendra summarized the lessons more effectively. In the following lesson conclusion from a fact and opinion lesson, Kendra demonstrated her ability to add more detail to her lesson conclusion. The conversation at the end of the lesson had to do with a decision the class made about a statement in the story being an opinion statement, not a fact. “You might think she’s the smartest dog in the world, but you have not seen all the dogs that have ever lived in the world. Tell me what a fact is. Something you can?”

A student said, “Prove.”

Kendra continued, “And an opinion in how someone?”

A student replied, “Thinks.”

Kendra said, “Thinks or?”

Another student said, “Feels.”

Kendra ended with, “Feels about a situation. Keep that in mind when you read our story tomorrow because there are lots of facts about animals and there are lots of things that are fiction, opinions about animals.

Although the closing is quick and did not include an example or summary of how to decide whether something is fact or opinion, she did include the definition of the strategy and a specific situation within which it could be used (i.e. “Keep that in mind when you read our story tomorrow.”)

In her final lesson, after three TD sessions, Kendra included even more information in her conclusion. The lesson focus was drawing conclusions. The students

read a story about how to keep a tadpole alive and happy. They were finishing up their discussion about what to do with the container. Kendra said, “If you cover it up, none of the air can get inside. So they didn’t come out and say, if you don’t let in air, you’re going to kill your tadpole, or eventually your frog. You drew that conclusion based on things you know about animals. So when you are reading. Anytime you’re are reading and the author doesn’t come out and tell you exactly what is going on, you have to draw conclusion, based on your own experiences, like you know we are going out to recess today, it’s not raining, it’s not snowing and it’s sunny, so we will go out to recess today.

So use those things, your personal experiences and the information that the text gives you to draw your conclusions for reading. This you can file in your desk for a while.”

In this lesson, Kendra included a specific text situation where drawing conclusions was used and summarized the procedures to follow to draw conclusions. She did not include that information in other lessons. In order to increase her performance even further, she could have had a student explain how they drew their own conclusions in the story.

*Summary of results for Cathy and Kendra's lesson closure.* Both Cathy and Kendra increased their performance in the information they shared when bringing closure to their lessons. They both added specific information about the content learned and the strategy focus. Cathy included students during closure during one lesson, but it was not evidenced again. Kendra did not include student thinking in her lesson conclusions.

*Summary of Performance for Means to Present Strategy Information*

*Cathy's performance.* Overall, Cathy increased her performance in all indicators in this category with one exception (i.e. introduction, modeling, shifting of instructional interaction and closure). The only indicator showing no growth was in eliciting student responses.

After training, Cathy increased her ability to add detail to her descriptions of strategies, but throughout the study, continued to talk about strategies as procedures to follow instead of talking about them as mental processes. She asked students for correct answers to questions, rarely asking for the thinking involved in finding those answers. Cathy increased her ability to add detail to her introductions and conclusions, however her performance was not consistent in those areas. Her most consistent growth areas were modeling and shifting instructional interaction from herself to the students.

*Kendra's performance.* Kendra increased her performance in most indicators. Three indicators showed more growth than others (i.e. introduction, modeling and conclusion). She added detail to those aspects of the lessons and included more modeling of her thinking for the students. For one indicator, shifting instructional interaction from

the teacher to the student, Kendra showed no growth and demonstrated inconsistent growth in the area of modeling.

Much like Cathy, Kendra shared mainly procedural information about strategies and rarely talked about strategies as mental processes. Kendra asked students to find answers in texts, but rarely asked them to explain how they got the answers or the strategies they used to help them understand what they read.

It is interesting to note that the indicators showing the most growth for both teachers, introductions and conclusions to the lessons, were not discussed and/or reflected upon much during TD sessions. The first TD session was the only time that those two indicators were discussed in some detail. Other indicators, i.e. modeling, eliciting student responses and the shifting of responsibility, were given much more time during TD sessions, and showed the least growth in this category. Because elicitation was done so little, the final TD session emphasized the need for elicitation of student responses, yet that indicator continued to be one of the lowest for this category.

#### *Intra and Inter-lesson Cohesion*

There are only two indicators in this category, (a) a sense of cohesion within the lesson and (b) a sense of cohesion with past and future lessons. Teachers' lessons should have a clear focus, internal structure and logical sequence. When topics are clearly aligned and have a clear focus, students know what is to be learned and how to learn it. Additionally, it should be clear to students how one lesson fits within in the broad sequence of all lessons on comprehension strategies. Good readers use strategies flexibly

and in concert with each other. Comprehension lessons should flow and reflect that cohesiveness.

*Sense of Cohesion Within the Lesson: Baseline*

A lesson with a sense of cohesion has structure, focus, and flows smoothly. If there are breaks or inconsistencies in the flow of the lesson or in the activity, the lesson is not as strong, making it more difficult for students to know what to learn and be able to do.

*Cathy.* Based on her ratings (Table 4.10), Cathy showed some inconsistencies or breaks in the lessons as determined by the raters.

Table 4.10

*Ratings Analysis Results for Intra and Inter-lesson Cohesion: Within the Lesson*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	1 (.94)	0	0,2,0	High variability. No trend.
Training	3 (0)	3	3,3,3,3	Low variability. Increase from baseline.
Kendra				
Baseline	2.3 (.47)	2	2,2,3	Low variability.
Training	2.2 (.4)	2	2,2,2,2,3	Slight decrease in means. Consistent ratings.

The following example illustrates the breaks and shifts in focus present in baseline lessons. This is a social studies lesson, just before the students began working independently. Cathy said, “Locomotives, steam engines, all of those things were the beginning. The textile industry, which was actually involved in the Civil War because of the cotton as well. So, now the war’s over. They’re rebuilding their country, and in less than 100 years in less than 50 years they are one of the strongest countries in the world. Read what happens, that was good and bad, for some of the people in the United States and I want you to think about what were the events that made us such a strong nation in the next 100 years.

So if you’ll look at the beginning of that section. If you’ll read the before you read. Start there. (Calls a student to read. The student reads the section.)

And so as we start this section, and they, the first heading is the United States from 1865 to 1914, there is a difference between the rich and the poor. Even the rich and poor white people, not just the black people. And so you’re going to be looking at some things and how people were moving across the United States, when did Nebraska become a state? (A student says the date.)

Okay, so it is not a state yet in 1865, so there is something that you are going to be reading about that gives you a big clue why in just a couple of years we were able to become a state. Read through that, make sure you look at all of the pictures and all the diagrams and look at all of the headings as you go. So you are going to do your vocabulary words, and you have some people again and not all of these are quite so familiar: Jacob Reese, you probably don’t know who that is. Jane Adams, maybe you’ve

heard of Woodrow Wilson. Any idea who Woodrow Wilson might be? How about Franklin Roosevelt?”

In this lesson, Cathy moved from idea to idea. She pointed out many different things to attend to (i.e. headings, diagrams, presidents, key words), which made the lesson seem choppy.

*Kendra.* Kendra’s lessons during the baseline and throughout the rest of the study had consistent ratings (Table 4.10). There was a logical progression, but there were breaks in the lesson focus at times. Most of the lesson breaks occurred during the point in the lesson where students walked to the front of the room to circle or underline particular words or sentences in a story. During that time, the other students in the classroom waited while the student at the story either circled a word or phrase or waited for assistance from the teacher.

*Baseline summary.* During baseline lessons, Cathy’s lessons had many breaks in focus and had movement from topic to topic. There was a logical progression from the beginning to the end of the lessons but the inconsistencies made it hard to focus on one or two key points. Kendra’s lessons also had a logical progression but had some inconsistencies and breaks in the flow of the lesson.

#### *Sense of Cohesion Within the Lesson: Results After Training*

*Cathy.* After training, Cathy’s performance increased to a consistent level, meaning that her lessons had more focus and internal structure. This lesson sequence is from the beginning of Cathy’s lesson after two training sessions.

“So I am just going to write notes down first. I’m going to kind of do this in two sections. I want you to do it with me. One of the things that comes out to me right away, of course we’re talking New York City, so I would write New York City. And the first word that kind of pops out to me is crowded, so this paragraph is talking about New York City and one of the first things I notice, the word crowded (writes it on an overhead). And then as I go through it, it’s looking at New York’s subways, it’s looking at their bus lines, and it’s looking at their taxi’s, cars and a ferry boat (writes each on overhead).

Now, those are some of the keys words that I see in there. Of course we have to have New York City, because that’s what the paragraph is about. And the first word that they mention is that it’s crowded, even though even 100 years ago it was crowded. And these are all ways that people do what?”

A student said, “Travel.”

Cathy said, “Travel and?”

A student said, “It’s their way of transportation.”

Cathy continued, “Their way of transportation, and the way they move around the city whether it is to work or just for entertainment. So now, I am going to write this into a sentence. And you can use manuscript or cursive. I will do it manuscript so you can read it better (talks as she writes on overhead) In New York City it is very crowded. People use subways, buses, taxis, cars and ferry boats to move around the city.

And yesterday when you were doing it, you were doing it highlighting, and you can’t highlight in this book. You get in college you can buy your own books and then you

can. So does this kind of summarized what this first paragraph is telling us? It is talking about New York City, and I'm picking just the key words out.

We're going to let you experiment a little bit by yourself. So you and your partner are now going to read the second paragraph and do the same thing. Pick out a couple of key words and try to write it in one sentence, if you have to use two, but even one sentence is better. So you and your partner read it together."

Cathy demonstrated her ability to have a clear focus and smoother transitions in this lesson and in all other lessons after training, as compared to her baseline lessons, indicating growth in her performance.

*Summary of results for Cathy and Kendra's within lesson cohesion.* Cathy's lessons maintained a logical sequence throughout the study. After training, she increased her performance showing less breaks in focus and flow. By the end of the study she had consistent structure, focus and flow. As mentioned previously, there was little change in Kendra's within lesson cohesion. She began the study with a clear progression and logical sequence, but had some inconsistencies and breaks in focus. These remained throughout the study.

#### *Sense of Cohesion with Past and Future Lessons: Baseline*

Lessons with a sense of cohesion with past and future lessons include references to both past and future strategy lessons. Lessons with lower ratings include no reference to other lessons or a reference to a past or future lesson, but not both. Students should clearly see how the focus of one lesson fits with all other strategy lessons, building a system of strategies to support comprehension problems.

*Cathy and Kendra's baseline results.* Cathy did not mention past or future strategy lessons in the baseline phase (Table 4.11). In Kendra's baseline lessons she referenced either past lessons or future lessons, but not both (Table 4.11). The following reference was from her last baseline lesson on similes. "The last thing we are going to do is, tell me if you've done this in second grade already. Have you heard the word simile?"

Some students said, "No."

Kendra said, "Okay, so this will be brand new."

Table 4.11

*Ratings Analysis Results for Intra and Inter-lesson Cohesion: Past and Future Lessons*

Category and phase	Rating means (SD)	Rating Median	Actual ratings (possible ranges: 1-4)	Emerging Patterns
Cathy				
Baseline	0 (0)	0	0,0,0	No variability.
Training	2 (.71)	2	1,3,2,2	Increase in means.  Increase from baseline.  High variability.
Kendra				
Baseline	1 (0)	1	1,1,1	No variability.
Training	1.8 (.98)	1	1,1,3,1,3	High variability.  Slight increase in means.  Slight increase from baseline.

*Sense of Cohesion with Past and Future Lessons: Results After Training*

*Cathy.* After training, Cathy referenced past lessons, but rarely future lessons. Most of the references were to previous lessons where students highlighted information. Two examples of references from lessons follow.

In a lesson after two trainings, Cathy emphasized summarization by using a highlighting activity. Cathy said, “And yesterday, when you were doing it, you were

doing it highlighting. You get in college, you can buy your own books and then you can. So does this kind of summarize what this first paragraph is about?"

In her final lesson of the study, Cathy referenced how students used prior knowledge to help remember simple machines. "On Friday when we started talking about the six simple machines, most of you could name the six simple machines, and you knew a little bit about them because you had done them before right? So you have had some familiarity with this."

*Kendra.* After training, Kendra continued to reference either past or future lessons most of the time, with the exception of two lessons in which she referenced both. Her reference in one of those lessons came at the end of the lesson as she explained what they were going to do with the information they had already generated. She said, "When we come back to this, all of these sentences, these summaries that we're writing for each paragraph, are going to make a summary for the whole article. So when we're done, you'll have the summary for the article on the back of your paper."

#### *Summary of Performance for Intra and Inter-lesson Cohesion*

*Cathy's performance.* Cathy increased her lesson cohesion performance in both her presentation overall and between past and future lessons. After training, her lessons were more focused and clear, and included references to past or future lessons, but not both.

*Kendra's performance.* Kendra showed slight growth in lesson cohesion. Her baseline lessons and after training lessons maintained similar flow and internal structure.

After training, she added references to both past and future lessons, but did not do so consistently in the training phase.

### *Understandings of Comprehension Strategies*

To determine teachers' understandings I used two data sources. First, I reviewed the ratings of teaching lessons looking for the types of information that the teachers shared about strategies, hypothesizing that the information they shared about comprehension would change as they gained new understanding demonstrated through their teaching lessons. The analysis of each teacher's instructional performance has been set forth previously and will not be outlined further in this section. A summary of that information will be included in the discussion section.

Second, I analyzed the introduction meeting, TD session and interview transcripts looking for themes that emerged regarding comprehension strategies. I used only comments that indicated understandings about comprehension strategies themselves, not instructional approaches.

After reviewing transcripts from the introduction meeting and the interviews, there were no comments made about comprehension strategies, therefore those data sources were not used in this part of the analysis. Only TD sessions were used.

Upon review of the TD sessions, there were two types of information that surfaced: (a) how teachers used strategies in their own reading, and (b) their understanding about comprehension strategies as tools for understanding.

*Strategies in Their Own Reading*

In the TD sessions, I included the teachers in an activity where I modeled strategies lessons. I acted as the teacher in order to model effective teaching practices, and the participating teachers role played as students. I elicited responses from the teachers as if they were the students learning how to use some of the strategies. I used this method to give the teachers the opportunity to experience the activities and instruction like their students would experience them. I also wanted to allow them to learn about the strategies as readers themselves so they have first hand experience with them. Through the elicitations and activities within which the teachers participated, it was clear they understood how to use strategies in their own reading to help them make sense of what they were reading.

In the first modeled lesson of the first TD session, I had the teachers read a short text and decide its meaning. One of Cathy's elicitations indicates the complex processes she used to understand the reading. "Well you're trying to interpret what the Weed Beater and the Fish Catcher [characters in the reading] are. When I first glanced at it, I thought Weed Beater, so it's somebody making a list to buy something, like a weed beater, you know. But then that didn't make sense with what else was there, and so then I knew that there was an activity involved. Something that they were planning."

Kendra added, "If you didn't tell us that it was on someone's windshield you would probably..."

Cathy included, "It would be harder."

Kendra finished, “That gives you a clue as to. They obviously know which vehicle to put it on.”

Cathy elaborated about how she processed the information, being strategic with her thinking. Through her comments she demonstrated her ability to think through the passage, monitor her thinking and change her thinking based on her understandings and what she had read.

Kendra added details to Cathy’s elaboration. She was not as clear in this conversation as to her thinking processes, but she followed along and added to the discussion indicating her understanding of what was said.

In the second training session, the strategy that was emphasized was summarization. In the introduction, we talked about how to summarize.

I said, “Okay class, today we are going to talk about practicing summarization, and we’ve talked about what summarization is. Can anybody tell me what summarization is? What you do when you summarize?”

Cathy responded, “Pick out the main ideas and draw it together.”

I replied, “Okay, good. It’s kind of the gist of the story. So what are some of the things that you have to do in order to do a summary, that we talked about?”

Kendra said, “Pick out the main ideas, so you can only pick the things that support the main idea, not the extra.”

In the last TD session, in a discussion about prior knowledge Cathy and Kendra shared their thinking again. This was another role-playing activity where I was the

teacher and they were the students. We read a passage and were talking about the connections we made with the text.

I said, “So what were some of the connections that you made with that? Or things that you understood, recognized, knew?”

Cathy said, “Well even if you don’t know a porcupine fish you know what a porcupine looks like and then you can imagine or picture what a porcupine fish looks like. Even if you didn’t know that.”

Kendra added, “And Finding Nemo [a movie connection].”

Both teachers had connections with what they read. Cathy was able to articulate her ideas more completely than Kendra, but both showed evidence of understanding. Later in the same session, the teachers read a short segment of a novel and shared their connections.

I said, “Do you have some things that you can share? So what were some of the connections that you had?”

Cathy began, “Well sitting down to dinner I guess is the connection with our family. Always sitting down at a meal together. That’s the evening meal. That’s when family sat down together, whether it was my family or my parents and my children. That was the evening meal.”

I continued, “So it was easy for you to picture what was going on in this part. What did you think? Was that important to you or important to understanding?”

Cathy said, “I think it’s both.”

I questioned, “Why? How?”

Cathy responded, “I guess I think because it sounds like you know that was what they were supposed to. They were supposed to sit down and eat together and there was no question about it.”

I said, “Good. Anybody else, connections? Same types of things?”

Kendra responded, “We have, my grandma at her house, has a bell and we would just to be screwy you know, would ring it because we were always tubing and maybe a little ways away and that meant come and get it. And the arthritis thing. I could, it says that there is no arthritis. That just reminded me of grandma and.”

I said, “Okay, so were those things interesting to you, or?”

Kendra answered, “Yeah.”

I asked, “Did you have any that were important to understanding?”

Kendra said, “I think she has a pancake turner in her hand. I think that it’s important for you to understand what’s going to happen if they don’t wash their hands.”

This sequence evidences the teachers’ abilities to use the strategies to think about what they are reading.

### *Comprehension Strategies as Tools for Understanding*

Both teachers commented throughout the study that comprehension strategies are skills or procedures used to help understand something that is read. Their understandings did not change much from the beginning to the end of the study based on their discussions in TD sessions.

During the first TD session, I involved the teachers in several activities where they role-played the students, and I role-played the teacher. I modeled instructional

performance for the teachers as they learned like the students would. After role-playing, I asked the teachers questions about what they saw in the lessons. Their comments indicate the understandings they had about what was shared. The following statements were made after the first role-playing activity.

I said, "Okay, so I'm going to stop. Now I'm not modeling anymore. So what did you notice about that lesson? Or just the introduction?"

Cathy replied, "Okay, you were explaining the visualization and what it was that you wanted them/us to picture in our minds and what it was so that we understand what we're reading."

Kendra said, "And everybody's picture is individual and useful to you."

I said, "Did I explain how to choose strategies to solve problems?"

Kendra replied, "I just put that I listened to the adjectives that you used, or the author used and this helped them create a picture. And that if you're listening to the text, you need to paint a picture in your mind."

I asked, "Did I explain why or how to choose it?"

Cathy said, "So that we can understand and comprehend and have a better idea of what we are reading."

I replied, "Okay. And then modeling the use of mental steps. Did I do an okay job of that?"

Cathy said, "You were going through and you were explaining some of the things the author said, but then you're saying that maybe that wasn't, doesn't sound tough, but then look at this, this sounds tough if you're using spurs in your nose, you're

emphasizing and bringing out those descriptive words to help us understand what it is saying.”

Both teachers commented on comprehension strategies. Cathy focused on how strategies can be used to understand and/or comprehend what is read. Kendra had the same focus and included other information regarding how strategies are individual for each person. She did not elaborate. Kendra also included information about how to use strategies when she commented on using the adjectives to paint a picture in the mind.

Later in the training session, after another role-playing activity, the teachers were part of another discussion about strategies.

I asked the teachers, “So when you use it [the visualization strategy], how do you use it to help you read?”

Kendra responded, “Well you form a picture at the beginning of the story and then later if something happens that doesn’t fit your picture, then you alter the picture or you ask questions about, if it doesn’t make sense with my picture, what did I read that doesn’t make sense or I might fit it to match.”

I continued, “In social studies and science? When you?”

Cathy said, “We’re doing US History right now, so you know you’re picturing what’s happening even though you have pictures in your mind, there’s pictures of history that you’ve seen, so you might talk about Lexington and Concord I can visualize that picture because I’ve seen it somewhere, so sometimes it’s past pictures that you also picture as you’re going, but then you’re trying to visualize what’s happen with what

they're doing and what's happening at that time. So you're kind of combining those things."

I asked, "How can the strategy be useful for students? If we're going to explain to them how it can be useful how is it useful?"

Kendra responded, "It helps them understand. Otherwise you're just reading words."

I asked, "Those things are great that you are telling them out loud and saying this really helps me and that's what I do in my mind. How will students know when to use the strategy? How do you explain when it would be useful?"

Cathy replied, "Well, I would think when there would be descriptive language and when you've got descriptive words and you're trying to figure it out what it all says and you're trying to visualize."

During the second TD session, Kendra summed up how a strategy can help understanding. She said, "Well, you form a picture at the beginning of the story, and then later if something happens that doesn't fit your picture, then you alter the picture or you ask questions about, if it doesn't make sense with my picture, what did I read that doesn't make sense or I might fit it to match."

In the third TD session, Kendra commented on something that was done well in an introduction to a lesson they watched. I began the discussion asking, "On your sheet, that was the introduction to the lesson. What were some of the things that she did really well when she introduced this visualization strategy?"

Kendra said, “She talked about it that it’s helpful when you are reading for pleasure. You most often use it then. It helps you see what you’re reading.” Kendra was able to see that talking about strategies as being useful was important and a good part of that lesson. Later in the same TD session, we talked about how using visualization might help the students understand. I asked, “How does that help them? When you’re getting them to visualize things, how is that going to make it easier to understand?”

Cathy said, “Well if they can visualize it maybe they can see what is going to happen or what it is going to describe eventually or what they are going to know about it.”

Kendra added, “Apply it to all sorts of situations.”

Both teachers continued to share that the strategies were helpful to understanding throughout the study but there was not much change in their understandings.

#### *Understandings of Comprehension Strategies Instruction*

Transcription data were analyzed from all meetings throughout the study. This analysis included the first meeting and the subsequent three TD training sessions. The following themes emerged after each meeting in regard to teachers’ understandings of comprehension strategies instruction.

#### *Results of the First Meeting*

The dominant theme about instruction after the first meeting was *how does this fit?* In the beginning, the teachers thought about how they would implement strategies instruction into their classrooms. They had their classroom routines in place and were considering how strategies instruction would work within those routines. Sandy (the

teacher that did not finish the study) explained her classroom routine, “We pretty much follow the same pattern. On Mondays, we introduce something. We introduce vocabulary on Tuesday and read. On Wednesdays, we go over what we read. Thursdays, we do a comprehension page, and on Friday, we do some study skill or reading skill....So there are skills like in a unit we work on five or six skills and then you just review. You know you add to them for the first two weeks or three weeks and then the next weeks you review those skills. Then you start another unit. There are six units.”

When I asked if her classroom procedures were the same, Kendra replied, “Sure I do. Same series, same set up.”

Cathy taught social studies and science and had a harder time explaining what her reading routines were and how strategies instruction would fit. “And you remember I don’t teach a reading class.” It was obvious that she was trying to think of times in her lessons that she could incorporate instruction on strategies. “So I would do it with science and social studies and I could do the same things...Probably, I would do it with social studies, because that’s where we have a reading assignment every day, well not every day, we do activities, but they have a reading assignment and then a worksheet.” “In social studies, okay, so if I could, could it be the topic, could be the main idea of the lesson? Can that be the topic of the lesson? That should work. Okay, another thing that I have is like ...Time for Kids, can I use that as well?”

Therefore, after the first meeting both Kendra and Cathy were trying to work out *how will this fit?* Their comments and questions focused on how they would incorporate the activities and suggestions into their current teaching routines and practices.

*Results of the First TD Session: Moving Beyond Procedural Language to Thinking Processes*

The theme of *How does this fit* continued for Cathy during the first TD session. She asked or commented about procedural issues throughout the training session, trying to figure out how she might include strategies instruction in her lessons. “Let’s say I was doing this with a social studies lesson, so I would go through those steps and those strategies, but then let them continue reading their lesson and visualizing on their own? ...So once they’ve read the lesson, then let’s say they’ve read their assignment, they’ve read their lesson, and then do you want to come back and then say read the text and them...so at the end of the lesson how do you...Okay, so what’s closure for the lesson I guess is what I’m asking. So this was the closure for getting them started, now once they’ve read their assignment, their lesson, then what do you do next?”

Later, during the training session, another theme began to emerge for both Cathy and Kendra. They both began to talk more about *thinking processes* along with procedural language and how the strategies could be presented to increase students’ understanding of what they read. Cathy asked a question about a topic she was currently covering. “I’m thinking that the idea that maybe I need to be showing some more pictures. You know we’ve got the experience, like you say. We’ve studied the history and all of this, but they may not. ...They have some really good pictures in the textbook, so I try to point those out ...but maybe I could bring in more pictures so they can see what I’m, what we’re talking about, reading about.” This comment indicated a different

thought process than her previous procedural questions or comments. In this statement, Cathy wanted to include an activity to increase her students' thinking.

The statements shared previously also indicated Cathy's desire to want to implement strategies instruction correctly. She thought about what had been learned along with what she knew and how she taught to brainstorm ways to implement strategies instruction.

Kendra had a similar pattern in her thinking during this training session. First, Kendra made a procedural comment, "I like the sticky note things. I think I could put them on the board." Later, Kendra commented on something she was going to try later in the week, and indicated a desire to get her students thinking about differences in texts. "Well, we're doing a story tomorrow, *Lon Po Po* or something and it's a Japanese tale and it goes along with *Little Red Riding Hood*. It's their *Little Red Riding Hood*. So we might read that first and talk about you know you have this picture of *Little Red Riding Hood* to fit with the description of what they're giving you, the Japanese."

Both teachers moved from thinking only about how the strategies would fit into their instructional routines, but also how the instruction of strategies could increase students' abilities to understand what is read.

#### *Results of the Second TD Session. Continuing to Consider Thinking Processes*

The second training session showed similar results for Cathy and Kendra as in the previous TD session. They included procedural comments regarding activities they could use and how the instruction can assist students' in making meaning. After a modeled lesson on using summarization, Cathy shared a lesson that she used with her students, but

included a comment about how the activity could help them summarize what was read instead of copying from the text to produce the summary. “I try to teach them to highlight in lots of different places...And the other thing that I’m thinking is that we are going to do a research paper and so when they were doing their research for science...they want to just copy word for word when they find something. And this would be a good technique to try to get them to do...and that’s so hard to teach, you know to take notes on a note card.”

She thought of ways the strategies could be helpful for the students within the classroom content taught. Later, she asked a procedural question about where modeling would fit within the course of a lesson. “Let’s say I’m doing a social studies lesson because this is a good way to do that, would you do the whole lesson together as a class and kind of do this, model it first and then have them come together like we did, like we wrote our notes and then our summary? Would you do that with that whole lesson?”

Kendra continued to move beyond just procedural explanations in her discussions of her lessons. Here is an example of an explanation of a lesson she had recently done with her students. Her last statement indicated her consideration of more than just procedures, but thinking processes. “It’s kind of on the back. Those are the details that I gave them ...I told them that it was out in the desert, and the storm clouds, and it was raining, and then the sun came out, and a double rainbow, and it was eating the worms that had come to the surface. So they were supposed to draw what they found important at the end.”

Instead of using instruction to explain only how to do strategies, Kendra talks about how she wants students to learn more about what they think is important.

*Results of the Last TD Session*

By the end of the study, Cathy and Kendra both continued to make procedural comments, as well as commentary about student thinking. When asked about how implementation was going, Cathy commented on an activity she had tried recently, talking about both procedural and mental processing topics. “Yeah, I guess I combine a lot of things ...like with social studies you just don’t do one [strategy], you know we do a lot of reviewing leading into the next lesson, and so I think they’re doing better.” She indicated that she included more than one strategy in her lessons and that they build on each other. She also commented on some procedural aspects of using comprehension strategies in her classroom. “In the Time For Kids that’s really easy for them to do. But then if they have notes in their journals, I start having them do that in there, highlight and pick out the main ideas.”

Kendra also mentioned a strategy lesson she had tried. She explained the lesson using mainly procedural descriptions. “We did sticky notes with the Weekly Reader and the five dollar bill thing, and then next year I’m going to have everybody bring highlighters so we can work on it all year with main ideas and supporting details and stuff.”

*Summary of Results for Understandings of Comprehension Strategy Instruction*

Both teachers began the study thinking about how strategies instruction would fit with what they were currently doing. They asked questions about procedures in their

rooms and activities they should and did try. These statements continued throughout the study. As the study progressed, the teachers added comments about how instruction should also focus on meaning making while reading. They talked about how lessons would influence the type of thinking that the students did and/or how they might use instruction to increase understanding of different readings.

#### *Teacher's Experience with the Teacher Development Process*

Based on transcriptions of interviews held with teachers four months after working with them, the teachers shared similar views about the teacher development model. The themes that emerged were: (a) the teachers liked working with others to learn about comprehension strategies, (b) the training was set up in a way that included the teachers in the learning, giving them concrete ways to implement in their classrooms, and (c) the videotapes gave them the opportunity to see their progress and ask for guidance.

#### *Working with Others*

Even after one teacher left the study due to health reasons, the teachers commented on how much they liked working with other teachers. Both Cathy and Kendra commented on how it helped to have other teachers to share ideas with allowing them to learn from each other. Cathy commented, "Because I liked the way other people have ideas and how they are using it. And it helps to feed off other people and you get ideas that way." Later she said, "I like the feedback from other teachers. You know, the more people you have and discuss what you're doing, I think that always helps." Kendra added that she liked to talk to the other teachers after the TD sessions to see what they were doing in their classrooms. "You know I had ideas that she could use and we talked about,

oh, what are you going to video and so you get ideas from each other.” When asked how it would have been different one-on-one, Kendra commented, “I wouldn’t have been able to go talk to Sandy about what she was doing and how I could have made mine [lessons] better.” Kendra added that she enjoyed getting to know a staff member that she had not spent much time with. “I didn’t know Cathy that well.”

Later in the interview, Kendra commented about a way to improve the training regarding working with other teachers, “I don’t know if it’s possible at different schools, but I would like to have other third grade teachers, you know, to see what they’re doing in their room.”

#### *Learning About New Strategies*

Another theme was that the teachers felt the training gave them new information about how to teach strategies in their classrooms. Both teachers commented about the method of presentation of the strategies. Cathy said, “I liked the way that you brought it to us and we actually had to be the students and you modeled for us which is also what we need to do more in the classroom as well. I thought that was an excellent way of teaching it.” When asked specifically about the modeling of strategies activities, Cathy commented, “I think it’s good for us as teachers as well also that we really know step-by-step, how students feel. How they go through that thought process to understand what we want them to do. So it’s good for us to be the student to put ourselves in that position.”

Kendra summarized it this way, “I liked the activities that you brought in, because then I was able to transform those to use them in my room. And the video was good too to see what I was doing and what I wasn’t doing well.” Later in the interview Kendra

added, “I really liked the way that you brought in books. Real books for us to look at and see how we could do that. I think you did a great job of making it real to life and showing us exactly what we needed to do.”

The training spurred Kendra to learn more on her own. She said, “Well, I bought the book [one of the resource books used to gather activities]. I’m interested in getting more information about reading strategies so I bought another book. I’m using it [the new book] in my classroom, and I’m really loving it.”

#### *Videotapes as Learning Tools*

A final theme emerged regarding the use of videotaping. Both teachers commented that although they were uncomfortable watching themselves on video, they learned from them. Cathy said, “You pick up things maybe you shouldn’t be doing or should be doing because it’s always hard to watch yourself.” Kendra commented, “Because if you go back, well even just discipline things, you know how many times you say “sh” when you should be doing something else or who’s paying attention and who’s not, that you might not notice when you’re up in front of everybody trying to get it presented. I hope to use that a lot.”

Cathy included a comment about the videotapes regarding her lesson presentation while recording the lessons. She said, “I think it makes you more conscious of what you are doing because you know it’s being videotaped. Sometimes you maybe don’t think about it or focus in or zero in as much. And sometimes you might not stick to the topic as good, so I think it makes you zero in so you don’t wander off and not touch on something

else. Not that I do that a lot, but I think we tend to do that once in a while. It keeps you focused on what you're supposed to be doing."

*Suggestions for Improving the Training*

Both teachers were asked to offer any suggestions or advice for making the training more useful. Cathy suggested one way to increase the appropriateness of the training would be to have included more information specific to science and social studies. She said, "Well probably for me, because I don't teach the reading, to bring in other ideas for science and social studies and those kinds of things. I mean, I could always adapt it, but you were zeroing in on, of course, reading and those kinds of things and those kinds of processes and since I don't teach the reading, that was probably the hardest, not hard, but that was what I had to do to adapt to get it to fit within my curriculum area." She also added that time is always a consideration when participating in a learning project. "I guess the time it took after school. You know it always takes a while, when we got together to do that. Not that that was bad. But you know we are always conscious of how much time we have. So it did take extra time to do it. Not that that was bad, but I guess that was the only that probably would be the hardest part."

Kendra suggested that if the project were done in another school, include more teachers from the same grade level. "I don't know if it's possible at different schools, but I would like to have other third grade teachers, you know, to see what they're doing in their room, but other than that I mean I think you had a good number of teachers and people that worked well together."

*Summary of Results for Teacher's Experience with the Teacher Development Process*

Based on the teachers' comments there were several aspects of the teacher development they felt were helpful. First, they liked to work with the other teachers. They felt the other teachers offered good suggestions and ideas. They also appreciated working with staff members with which they do not normally get to work. Relating to this topic, one teacher suggested that if it were possible, she would have liked to work with other teachers teaching the same grade level, which would allow for more discussion about topics specific to that grade level.

The teachers felt they learned new ways to teach comprehension strategies through the activities within which they participated. They liked being a part of the activities as students, learning how the students would react and respond. They also learned from watching themselves on videotape. The comments they received from the other teachers and the researcher helped them better understand what they could do better.

Finally, both teachers offered suggestions for improving the training. Because one of the teachers taught content classes, she would have liked to have seen more applications to her content. One teacher also commented on the time it took to complete the training. Although she felt it was beneficial, it took time away from other things.

## CHAPTER 5

### DISCUSSION

This qualitative study examined aspects of a professional development process on teachers' understandings of reading strategy instruction. Its purposes included: (a) noting any changes the teacher development process had on teacher performance, (b) determining how teachers' understandings of comprehension strategies and comprehension strategies instruction changed over the course of the study, and (c) understanding how different teachers experienced the teacher development process. Overall the findings indicated that the teachers demonstrated changes in strategy instruction understandings and behaviors during the study.

#### *The Relationship of the Teacher Development Process to Teacher Performance*

Based on ratings and transcript data, the teacher development process appears to be positively related to both Cathy and Kendra's instructional performance. Overall, Cathy and Kendra increased the amount of information they shared with students regarding comprehension strategies. Both teachers shared more general information about what strategies are and how they can be used to help make meaning. As they learned more, they shared more with their students. This information remained at the procedural level however. Throughout the study, both teachers taught strategies as procedures to follow rather than flexible, mental processes. Other research on comprehension strategies instruction found the same results. The teachers in Anderson's (1992) study made progress over the three-month period, but did not move beyond procedural instruction. In

the Taylor et al. (2004) study, even after two years of training and on-going teacher development, comprehension strategy instruction was seen the least in reading classes.

A more fine-grained examination of the rating scale results illustrated that there were components measured by the scale that were not as strongly developed. For both teachers eliciting student verbalization of strategy use was an area that showed no improvement. Other areas that showed little growth included how to decide which strategy to use and how to perform the strategies. These components were also difficult for teachers to perfect in Duffy's (1993) research when he developed his Nine Points of Progress and Duffy et al's. (1987) later work with first grade teachers. Again, the research indicates that teachers make progress, but without continued development, rarely become experts.

Why do teachers not make more progress in one year? Why is it difficult to make the shift in instructional practices? The difficulty could be due to several factors. First, it takes a long time for students and teachers to fully develop self-regulated systems of strategy usage and strategies instruction. It seems that the complexity of learning how to use strategies and how to teach strategies are similar in nature. Students have to learn new ways of thinking about their own thinking, replacing existing mental models. You can liken it to learning a new way of tying your shoes. If you have used one method for five, ten or even twenty years, learning a new way of tying could take a great deal of effort and practice. So does learning a new approach to comprehending what is read.

Teachers are similar. Experienced teachers may have used one method of instruction for five, ten or even twenty years. Adjusting their thinking and method of

teaching can take a long time, even for someone that *wants* to make a change (El-Dinary & Schuder, 1993; Taylor et al., 2004). Teachers have to adjust their mental models of what comprehension strategies are and how to use and teach them as processes rather than procedures (Duffy & Roehler, 1989; Pressley, Goodchild, et al., 1989). Even teachers with little experience may find teaching strategic processes difficult if they have not had experience in the method. Several other factors could affect the change process for the teachers as well.

Guskey (2002) purports that teachers are more likely to make and sustain a change if they see students benefiting from the change. In the case of strategies instruction, it takes time for students to adjust their thinking and begin to use strategies independently (Palincsar & Brown, 1986; Schuder, 1993). If teachers do not see success with students early in the instructional change process, they may become frustrated and stop the instructional approach.

Second, it takes a long time for teachers to learn and adapt their teaching practices to a more flexible, goal-oriented curriculum, especially if they are used to using textbooks' teachers manuals as their guides for instruction. Duffy (1993) and Taylor et al. (2004) found this dilemma to be true early on in their research. Teachers taught strategies like they were presented in textbooks, as procedures, and used worksheets and drill as practice methods. Duffy (1987; 1993) had to train teachers how to recast strategies as processes and found some level of success. Again, the process of rethinking instruction set forth in the textbooks took more than a year. Taylor et al. (2004) found that even after

two years of school-wide teacher development, comprehension strategies instruction continued to be taught and practiced through textbook drill and practice worksheets.

Although there were some similarities overall between teachers, there were differences between the results of each teacher and how they progressed through the study. Duffy's (1993) Nine Points of Progress continuum helps to explain the progression the teachers had through the training. In review, there are nine points on the continuum: 1) confusion & rejection, 2) teacher controls the strategies, 3) trying out, 4) modeling process into content, 5) the wall, 6) over the hump, 7) I don't quite get it yet, 8) creative-inventive, and 9) -unnamed. Each step on the continuum was described previously, but a review of the first steps on the continuum will be offered in conjunction with a description of the steps within which the teachers progressed in this study.

Cathy started at point one, confusion and rejection, because she did not talk about strategies in her lessons and focused mainly on the content of the class. Keep in mind that Cathy taught social studies and science lessons, not reading classes so her emphasis was on the content, not the act of reading. Although Cathy was at this point, she did not refuse to try or implement the strategies, she had simply not integrated any of them into her lessons at the start of the study during the baseline. As the study progressed, Cathy began to move to point two -- teacher controls the strategies, as she started to talk about strategies with her students in relation to their textbook. Kendra started at point two. Kendra used her textbook to teach strategies. She focused on right answers with little attention to metacognition about strategy use.

Although textbooks do contain instruction of comprehension strategies, the types of instruction and thinking that bring about flexible strategy use must go beyond the practice that is offered in textbooks. Duffy et al. (1987) found this to be true when they taught teachers how to recast traditional methods presented in textbooks. Readers need time to learn and practice strategy use with real reading situations that go beyond what the textbooks offer if strategies are to become automatic (Palincsar & Brown, 1984; Pressley et al., 1992).

The focus on the practical aspects of a new implementation is similar to other studies in teacher change. This focus was noted specifically in the Taylor et al. (2004) study when reporting their findings on comprehension strategies instruction. Taylor et al. (2004) stated that even after training, comprehension strategies instruction emphasized correct answers and worksheet response activities rather than discussion and sharing of thinking. Research on video clubs (Borko et al., 2008) highlighted this focus as well. For most of the teachers, their first year of implementation focused on instructional practices. By the second year, teachers began to talk more about how their instruction impacted student learning as well as the dynamics of the discussions in the class. Routines and procedures were predominant at the beginning of the change process across this study and others.

As the study progressed, so did progress on the continuum. Both teachers moved from point two to point three, the trying out point. They introduced strategies and gave specific directions or cues about how to use the strategies. They generally talked about strategies independently, but did not talk about strategies as adaptive tools to help make

meaning. In order for students to use strategies adaptively and independently, they have to be taught to do so, especially students that struggle to comprehend. If the strategies are taught as procedures, students see and use them as procedures (Duffy, 1987). When strategies are taught as processes, students use them as processes (Duffy, 1987; Palincsar & Brown, 1986).

Between the last two training and discussion, or TD sessions, the teachers moved to point four: modeling process into content. Duffy (1993) explains that at point four, teachers begin to teach strategies right before the students read text, relating the strategy to the reading the students will do. At point four, teachers also model their own thinking for students. Although neither Cathy nor Kendra modeled consistently, they began to show evidence of it. Both teachers did start to teach the strategies right before the students read a passage. However, they continued to use textbook reading material. They did not expand instruction and practice to more authentic reading situations. Although it is important to be able to use strategies in textbook reading, it is important to learn how to use them when needed in all types of reading situations. As Duffy (1993) found in his research, when students were taught to use strategies in textbook reading situations, they rarely transferred that learning to real text situations. If teachers want readers to use the strategies in all of their reading, students need to be taught how to use them in those specific situations.

This shift from point two to three, and three to four, is commensurate with the Anderson (1992) and Taylor et al. (2004) studies as well. As the teachers worked with and taught strategies, they tended to include more real text reading situations where

strategies can be used. Teachers also offered more specific guidance for students as to how to decide which strategies are most effective in certain situations and to use strategies to help make meaning. However, Duffy (1993) found that when teachers taught strategies in the context of textbooks and workbooks, the students were less likely to see reading strategies as more than just schoolwork. Students did not use strategies in other, authentic reading experiences.

By the end of the study, the teachers were close to hitting the wall, or point five on the continuum. This was good progress considering all other studies of teacher development in comprehension strategies instruction demonstrated similar findings. It was somewhat surprising however, that Kendra did not make more progress throughout the study. She began with higher ratings in many of the components of the rating scale, but did not move any further on the continuum than Cathy. I would have expected her to be further along on the continuum, because she already had some background to build upon.

The research (Duffy, 1987; El-Dinary & Schuder, 1993; Taylor et al., 2004) suggested that it took over a year for teachers to begin to move toward a strategic approach to teaching. It was not stated in the research that the teachers had previously developed skills, so it is likely that many of the teachers were brand new to the types of instruction that were presented to them. In Kendra's case, she already had some knowledge of strategies instruction and demonstrated those skills in her baseline lessons, however, that knowledge did not help her move more quickly beyond point four and five.

This result indicates just how hard it is for teachers to move beyond Duffy's (1993) proverbial "Wall", and that this point of progress was aptly named.

Both teachers continued to use procedural language in their instruction and gave text examples to demonstrate where strategies could be used. They were not quite to the point where they had broken away from textbook-directed instruction and into more authentic reading experiences. They had moved a considerable distance along the continuum from where they began. Other studies (Anderson, 1992; Taylor et al., 2004) indicate similar results. The longer the teachers have training and support, and work with strategies within their classrooms, the more progress they make toward becoming experts. Research on teacher development in comprehension strategies instruction indicates the difficulty of developing expert comprehension instruction teachers (Brown, et al., 1996; Duffy et al., 1986, 1987; Pressley et al., 1992). It takes a great deal of time and energy to become self-regulated readers and self-regulated teachers of comprehension (Hilden & Pressley, 2007). The results of this study indicated similar findings.

#### *Understandings of Comprehension Strategies*

Did teachers' understandings change about comprehension strategies after participating in the teacher development program? I hypothesized that the teachers' understandings would be evidenced through an increase in the information they shared while teaching and in their comments throughout the study. Based on the results of the teachers' ratings on the rating scale, the teachers' understandings did change. In general, both Kendra and Cathy increased their performance by the end of the study, adding more

detail to their lessons and beginning to move from procedure-focused lessons to more process-focused lessons. If teachers had not changed their understandings about strategies, they would not have increased their performance.

This finding is not definitive, though. Lesson and TD session transcripts did not demonstrate a change in understandings. There was little difference in their comments from the beginning to the end of the study in teachers' quantitative data, but themes did emerge as to what they talked about. The two themes that emerged were: (a) teachers used the strategies in their own reading, and (b) teachers understood comprehension strategies as useful in making meaning while reading.

During the TD sessions when the teachers participated in activities as "students", they evidenced their understandings of strategies. They talked about how they used strategies to help understand what was read, using specific language as to the mental steps they used to employ the strategy. Cathy was more explicit in her comments than Kendra. Knowledge about personal strategy use is important when teaching students about strategies. A component of a strong strategies lesson is teacher modeling. If teachers are not sure how *they* use strategies in their own reading, it would be difficult to model it for others. I had hypothesized that the teachers would not have that kind of strategic knowledge about strategies at the beginning of the study, but they did. Their thinking did not change over the course of the study, however.

This lack of change in their comments might be true for several reasons. Cathy had little experience with comprehension strategies because she had taught science and social studies for many years and had not been exposed to how strategies instruction

could help with content reading. Kendra's experience with reading instruction was based mainly on the advice of the textbook teachers' manual. She was also in her third year of teaching and said she had not had much training in comprehension strategies instruction. Because of their limited experiences, the first two TD sessions emphasized general knowledge about comprehension and comprehension strategies. They were just learning about comprehension strategies, so they did not comment much about them during the first two TD sessions.

A second reason may be because the reflection and discussion throughout TD sessions and during teaching lessons emphasized instructional techniques rather than student thinking or processing of strategies. We spent much discussion time talking about activities that could be used, rather than on how the strategies could be helpful for students. Other studies found this to be true as well. The first year of the video club in the Borko et al. (2008) study was spent on practical aspects of teaching. It was not until the second year of the video club that teachers started noticing and talking about the thinking their students were doing. Taylor et al. (2004) found this to be true with their study groups as well. The teachers spent over half of the first year learning how to be more productive in their groups. The rest of the year was spent on broad aspects of teaching reading (e.g. guided reading, reading comprehension, and interventions).

In the current study, the teachers demonstrated little change in their understandings with the other theme indicating that the strategies are useful in making meaning when reading. Both teachers said that we use comprehension strategies to help us understand what we read. However, by the end of the study they did not demonstrate,

through discussion, a deeper understanding of the complexities of coordinating a repertoire of strategies to understand what is read.

It would seem that as the teachers changed their performance, they would talk more about how their instruction affected student growth and performance. That was not the case in this study. The teachers rarely moved beyond procedural discussions about how they would implement activities into their classrooms during discussion groups and TD sessions. The teachers did not move much beyond procedural language in their lessons either. This suggests that what the teachers understand about comprehension strategies is what they are going to teach about them.

It is clear then that to change teachers' understandings takes time, but until there is a shift in understandings, there will not be a shift in instruction. Teacher development must reflect that thinking. If we want to change understandings there must be a mix of practical applications for classroom implementation along with sustained discussion and evaluation of how teaching impacts learning.

#### *Comprehension Strategies Instruction*

How did the teachers' understanding of comprehension strategies instruction change? There was some change overall in their understandings, based on transcription data of TD sessions.

The first theme that emerged during the first training session was how strategies instruction was going to fit into what they currently did. The teachers wanted to know how to implement "it" (i.e. strategies instruction) into their classrooms along with the

procedures they should follow to teach the strategies. Their comments and questions focused on the procedural steps in teaching and learning about comprehension strategies.

As the study progressed, the teachers continued to emphasize procedural usage of strategies, but added comments about how to teach strategies in order to help students understand what they read. This mixing of both procedural language and language about how the strategies can be useful for students' understanding of what is read continued throughout the study. However, if readers are to learn how to use comprehension strategies metacognitively, they have to be able to practice strategies in more than procedural ways. Although the teachers in this study were talking about strategies more to students, they never got to the point where they talked about them as cognitive process, making it less likely that students will use them in any other way than as procedures (Duffy, 1993).

#### *The Teacher Development Process*

How did the teachers experience the teacher development process? Several themes emerged: (a) they found it beneficial to work with other teachers, (b) they learned more about strategies through the trainings, and (c) they learned from watching themselves and other teachers' lessons on the videos.

First, the teachers in this study found it beneficial to work with other teachers. They learned from each other's comments and suggestions and enjoyed getting to know each other more than they had in the past. Research studies on teacher development in the area of reading comprehension consistently report that one of the key components of strong teacher development programs is some form of collaboration among teachers

(Anderson, 1992; Brown et al., 1996; Eaker et al., 2002; Pressley et al., 1992; Taylor et al., 2004).

Teachers believe that working together helps them become more skilled teachers. In the Borko et al. (2008) study, teachers believed that by working with each other they were able to learn new teaching strategies and realize that they all struggle with the same types of teaching issues. In the Taylor et al. (2004) study, one teacher summed up her thinking similarly, “At first I thought study groups were a waste of time. But it’s been very positive. It has helped us use similar approaches. We have more unity. I hope we can continue with study groups. As teachers, we need time to reflect on the effectiveness of our lessons” (p. 63). Collaboration brings teachers together to talk and learn from each other.

Second, the teachers learned more about comprehension strategies and instruction because of the teacher development process. Both teachers commented that they liked the types of activities within which they participated. They both commented that participating as students was effective, because they experienced something similar to what the students would experience as they learned how to process reading information in a different way. Additionally, they believed the activities were things they could incorporate into their classrooms. As Duffy (1993) pointed out in his continuum, when teachers are learning something new, they need and want activities they can implement into their classrooms right away. As they use those activities and learn more about the new teaching method, they begin to adapt them depending on the needs of their students. The teachers in this study were at the point where they needed some activities to get them

started using strategies instruction in their classroom. The more they use those specific activities, the more likely they will continue to change and grow.

Finally, the teachers believed that the use of videotaping was helpful in that they could see their performance and gain insight into how they might modify and increase their performance. These results are commensurate with the studies conducted on video clubs (Borko et al., 2008; Sherin & Han, 2004; Sherin & van Es, 2005). When teachers are able to view their own teaching and feel safe enough to reflect and discuss openly, they can change their performance.

*Social cognition and self-regulation.* Beard El-Dinary and Schuder (2006) suggest that, "...just as students need interactive modeling, coaching, and problem-solving opportunities to become strategic readers, so do teachers need these components to accept and carry out effective, flexible teaching of strategies-based instruction" (p. 217). The teachers in this study were learning about a complex teaching strategy involving the instruction of complex thinking tasks by both teachers and students. The comment suggested by the researchers matches closely with social cognitive theorists beliefs (Bandura, 1986) and self-regulation theorists (Pintrich, 2000, Zimmerman, 2000) about learning both from the standpoint of the teacher (Hilden & Pressley, 2007) and the students (Schunk & Zimmerman, 1997; Schunk & Zimmerman, 2007).

Pintrich (2000) explains learning as, "an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment" (p. 453). Learning is complex and a teacher

development process must support the learning efforts and processes that the teachers progress through as they implement new things.

Support can come in a variety of ways, but the research on teacher development in the area of reading (Anderson, 1992; Duffy, 1993; Taylor et al., 2004) and some research on teacher development as a whole (Guskey, 2002) suggest that the process requires (a) time and effort on the part of the teachers and the school district, (b) regular feedback, modeling, and coaching for teachers that includes an analysis of student progress, and (c) continuous teacher development over long periods of time.

In this study, the teachers were given supports via collaborative reflection and practice with feedback and training over several months. Although this was not a long-range project, it was clear that the teachers were showing progress toward becoming stronger comprehension teachers. It is likely that with more time, practice, and some form of feedback, they will continue to grow. If they continue to videotape themselves teaching, the videos could become a valuable resource for self-regulative feedback for each teacher.

### *Implications*

Based on the results of this study, several implications have come to light in the areas of comprehension strategies instruction and the development of teachers. First, it takes a long time to become an expert at comprehension strategies instruction. The teachers in this study were involved in four training sessions that included feedback on their teaching over a five-month period that focused on explicitness in teaching comprehension strategies. Although they showed progress, they were not experts in

teaching strategies as cognitive processes by the end of the study. Other research studies affirm this finding. El-Dinary & Schuder (1993) found that one year of training was not enough for the two cohorts of teachers to become experts as did Anderson (1992) in her study which was conducted over a three month period.

For greater change to be made, it is likely that with more time in discussion and practice, teachers would show more progress in their instructional practices over a longer period of time. This study included only one semester of training, other projects, where more progress was made, included years of training and support to teachers using a variety of different training activities (Brown & Coy-Ogan, 1993; Duffy, 1993; El-Dinary & Schuder, 1993). This evidence suggests that if teachers are making progress now, with the same type of support they would continue to make progress. With only one year of training, progress is made, but it is limited.

Second, a teacher development process using discussion groups and videotaped teaching lessons in a rural setting can be useful in assisting teachers in learning about comprehension and comprehension strategies and increase instructional performance. This is important because not all schools are able to afford large-scale change projects that include large numbers of staff members. In this case, the teacher development process incorporated some of the training components from larger projects and implemented them with a small number of teachers. Some examples include modeling of strategy instruction by the trainer (Taylor et al., 2004) and using videotaped teaching lessons as a means of reflection (Borko et al., 2008; Sherin & Han, 2004; Sherin & van Es, 2005). The results of this study were similar, making the teacher development

program ideas valuable for teachers or administrators in rural schools wanting to increase their abilities as reading teachers. Additionally, the use of videotaping could be a viable option for coaching opportunities if districts are not able to afford literacy coaches or teacher developers (Borko et al., 2008; Sherin & Han, 2004; Sherin & van Es, 2005).

Third, the addition of modeled lessons where teachers act as students and trainers/coaches act as teacher, could enhance teacher development processes. In this study, the teachers commented that they liked the opportunity to experience the activities like their students. Additionally, as the teachers began thinking about their own processes as they read, they shared more of that information with their students, advancing their performance as reading teachers. It is possible for school districts to invite experts in this area such as literacy presenters from their regional Educational Service Units to model and practice instructional techniques with teachers. If this type of involvement is not possible, new technological advances such as synchronous internet connections could be an option.

In regard to collaboration in a rural setting, although Kendra suggested having another teacher participate from the same grade level, both teachers showed growth in this study. This indicates that reflection and progress can be made even when discussion occurs with teachers that do not teach the same grade level or subject. In rural settings where it is rare to have more than one teacher per grade level, collaboration should continue to be a strong element in teacher development programs. Even if teachers are not talking about the same age students, there are still opportunities for reflection on practice and how those practices influence student learning at any age.

### *Implementation Ideas*

How could this process be implemented into another rural school? There are some possibilities for different levels of adoption.

*School-wide.* The teacher development process could be implemented school-wide using similar procedures outlined in the methods section. The first step would be to find someone that could lead the process. The researcher played that role in the current study. Rural schools have several possibilities for this role. A local teacher leader could be used to lead this process. Many schools have Title I teachers, literacy coaches, or classroom teachers with expertise and interest in leadership roles in their buildings. Administrators with interest or expertise could also serve in that capacity. If there are no options available at the local school, other resources for leadership could come from local educational agencies such as Educational Service Units, or personnel from regional colleges or universities with Schools of Education.

The leader could manage the process in different ways depending on their level of expertise. If the leader has expertise in the area of reading comprehension, they would be able to organize training sessions similar to the steps set forth in the methods section of this study. The leader would need to devote time to prepare for the training sessions, materials use, and discussion group session leadership. The school and staff would want to commit to *at least* two years of teacher development. Training would include two initial training sessions and monthly teacher discussion group sessions including videotape reflection. Two years would increase the likelihood that teachers would move beyond procedural explanation of strategy instruction.

If the leader of the process does not have reading comprehension instruction expertise, they could lead in a managerial or facilitator role. They could be responsible for setting up training session and discussion group times, but would not be responsible for the content of the presentation. In the place of a consultant, staff could use a variety of resources for learning about best practices in strategies instruction. There are many resource books and articles available about comprehension strategies instruction. The internet is also a valuable resource for both teaching and free video clips of strategies lessons. If money is available, teachers can purchase DVD's that include both content knowledge about comprehension strategies instruction and modeled strategies lessons.

Teachers could use those resources to implement explicit strategies instruction in their classrooms. As they implement new approaches, they could videotape their teaching and bring their taped lessons to discussion group sessions. Using the rating scale to frame their discussions, the teachers could view their taped lessons, assessing their teaching and reflecting on their performance. If teachers are not comfortable with videotaping, they could use the rating scale and observe in each other's classrooms using the results as a springboard for discussion. Throughout the process, the leader would manage and organize the staff and resources to support the implementation. All procedures and learning tools would be used for teacher development only, rather than in an evaluative manner.

*Voluntary teacher groups.* The processes set forth in this study could also be used with smaller groups of individual teachers wanting to increase their performance. If a consultant is not an option, the small group of teachers could use the same methods

suggested in the previous discussion, i.e. using resource materials to gain content and procedural knowledge, and use teacher discussion groups, videotaped teaching lessons and the rating scale to reflect on their performance.

#### *Ratings as a Means to Ascertain Teaching Performance*

A rating scale was used to monitor teachers' performance. Throughout the analysis of both rating scale and transcription data, it was clear that the appropriate use of the rating scale was a useful tool to implement as a means to determine teachers' explicitness in their lessons if there is proper training in its use. Previous to the beginning of the study, Duffy and his colleagues (1987) trained several research assistants using five 1- to 2-hour sessions. They continued to train on the rating scale until reliability reached .80. At that point, they began the study. Throughout the study, validation was done regarding the reliability of the instrument, making sure the raters were consistently using the rating scale. In this study, consensus was used to make sure the ratings were reliable because inter-rater reliability scores were not consistently above .80, validating the earlier findings.

Depending on the setting and availability of resources, the implementation of the rating scale could be useful for teacher development purposes. A clear plan for reliability checks is appropriate if the tool is to be used effectively with teachers. When those checks are in place, teachers, reading coaches and/or administrators can use this tool to inform them about individual teacher and whole staff performances, and inform and direct teacher development programs.

Ratings for each indicator can be graphed and charted, much like was done in the study, and trends in teacher performance can be noted. Teachers can work together in teams to reflect on their instructional practices and use teacher development resources (i.e., money for training, research articles or other resources) to learn more about comprehension strategies and implement them into their classrooms. As the ideas are implemented, the ratings can serve as a monitoring tool for the teachers and leaders to help track their progress and notice if further training or resources are needed.

#### *Limitations to the Study*

The first limitation of this case study is that it took place in a rural setting with only two participants. This small group of participants makes it inappropriate to generalize the findings to larger settings. The findings for this study however are in line with the findings from the larger studies and support the need for further research of teacher development processes that include rural settings.

Second, the study only looked at sample lessons chosen by the teachers as strategy lessons. The results may vary if data were taken every day instead of during specific lessons where teachers knew they would be rated and videotapes would be used for reflection. For example, Cathy commented during her exit interview that when she knew she was being videotaped she was more conscious of what she was doing. She focused in more on the topics for that lesson than she might in other lessons. This could mean that although she was using the teaching methods during the lessons she knew were going to be videotaped, she may not have been using them during other lessons. If she used the methods more consistently, her performance may have improved even more than

it did. The more a person practices something, the more likely it will become standard procedure, much like readers learning to use comprehension strategies. At first, some readers have to deliberately think about their thinking and the strategies they use, but once those strategies become skills, the reader does not have to think about them any more. Those processes have become automatic.

Third, the teachers volunteered to be a part of the study. By volunteering, they demonstrated their willingness to want to learn and try new things in their classrooms. The results may vary if teachers did not volunteer or were made to be a part of a school-wide teacher development process that was mandated.

Fourth, I was the primary researcher and trainer in the teacher development process. I also conducted the exit interviews of the teachers. The teachers could have shared what they thought I wanted to hear regarding their experiences with the training. By coordinating the whole teacher development process I could have been creating a conflict of interest. This could add bias or inaccurate results to that data set. It could be argued, however that in other rural settings the principal of the building could be the teacher development leader creating a similar conflict of interest. This study could offer evidence that although the possibility of conflicts of interests could occur, they can be overcome and positive change in teacher performance is likely.

#### *Suggestions for Future Research*

Even with these limitations, the research on specific teacher development methods for rural settings is important if we want to teach all students how to make

meaning while they read. The following ideas for future research could build upon the current study.

First, continued research needs to be conducted in the area of teacher development processes emphasizing strategies as thinking processes. The results of this study are commensurate with similar studies regarding the limited emphasis on metacognition by teachers when instructing about the use of comprehension strategies. Teachers continue to share procedural knowledge about strategies, even with considerable amounts of teacher development. Are there other methods that would increase this aspect of instruction more rapidly?

Second, the teacher who taught reading started this study with higher ratings, but the content teacher showed more rapid growth. They both ended the study at about the same point in regard to the rating scale. Was this difference in their growth trajectories due to the amount of knowledge they had at the beginning of study? Studies comparing entry level knowledge of teachers and their progress could add depth to the knowledge we have about how teachers learn to teach strategies instruction.

Third, it would be interesting to see this study replicated with the addition of using student comprehension data as a means for added discussion. Guskey (2002) suggests that teachers are more likely to make changes when they can see the positive effects of the instructional change on student performance. The focused use of student data might be a key to moving teachers beyond “the wall”, however, it may take some time for students to demonstrate an increase in their abilities to comprehend.

In the literature review, several studies of comprehension strategies demonstrated increases in student achievement in comprehension (Duffy & Roehler, 1989; Palincsar & Brown, 1986; Pressley & Afflerbach, 1995; Rosenshine & Meister, 1994). The increases in achievement came after several months of instruction (Palincsar & Brown, 1986, Rosenshine & Meister, 1994) and in one case, after a year of practice (Pressley & Afflerbach, 1995). Because it might take a while for students to start to show increases in achievement, careful consideration should be made as to when during the teacher development program to introduce this data for discussion. One possibility might be to use teacher judgment of student performance as discussion points in the first few months of teacher development. After several months, comprehension data could be added as a means for discussion. Teacher judgment is not scientific though and can be flawed.

Fourth, longitudinal studies of rural teachers involved in teacher development programs for reading comprehension instruction need to be conducted. There is such a limited body of evidence to offer guidance for small schools in their efforts to increase teacher performance in rural schools. This study showed that teachers could make progress over a short period of time. Would longer teacher development processes move teachers beyond “the wall” and closer to becoming experts? Longitudinal studies in urban schools demonstrated that it could. Would results be similar in a rural setting?

### *Final Reflections*

We have learned so much more in the last century about how readers comprehend text and how teachers can share that information with students so they can become competent readers and learners. Even with the amount of research evidence supporting

the use of authentic methods of teaching reading, many school districts are feeling the pressure from state and federal mandates to follow prescribed “programs” to teach reading. As this research study and others like it suggest, comprehension instruction must include authentic reading experiences with complex teaching practices that cannot be simplified into programs that include one to two sentence modeling examples or one to two sentence explanations of how to use strategies to help think about text.

Research in the area of teacher development needs to continue, in schools of all sizes and configurations. This research should be longitudinal to observe and validate the advancement along Duffy’s continuum. Research needs to focus on methods of development that move teachers beyond textbook programs that focus on surface level discussions and correct answers to authentic reading experiences for students that will increase their abilities to comprehend whatever they read. If teachers are not given these opportunities to learn and grow beyond surface level teaching of strategies, many students will continue to struggle to understand what they read inside and outside of school.

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## Appendix A

### Rating Scale for Explicitness of Teacher Explanation (RSETE)

#### Information Presented about the Strategy

1. Rate how explicit the teacher is in informing students that the task to be learned is a strategy for solving a problem encountered in reading.
  - 0 – The teacher makes no statement about what is to be learned (total absence of...)
  - 1 – The task is named/labeled, but there is little information beyond “We will learn about prefixes...”
  - 2 – The task is named/labeled and there is some elaboration beyond “We will learn about prefixes...”
  - 3 – The task is described as an adaptive, flexible strategy (“We will learn how to...”), but it is not an exemplar
  - 4 – An exemplary presentation of the task is an adaptive, flexible strategy to solve a problem encountered when reading.
  
2. Rate how explicit the teacher is in informing students that the strategy is useful as they read.
  - 0 – There is no statement of where the skill would be used (total absence of ...).
  - 1 – The teacher only mentions that the skill is generally useful or useful in reading, but does not specify why or when.
  - 2 – The usefulness of the task is related to the future (“When you get in sixth grade...”) or is vague or general in stating why or when it is related to a particular text (“It helps you get information...”)
  - 3 – The immediate usefulness of the skill is illustrated with a specific reference to a particular example, but it is not an exemplar.
  - 4 – The teacher provides an exemplary statement of the immediate usefulness of the skill in reading connected text in which one or more concrete examples are used to illustrate.
  
3. Rate how explicit the teacher is in telling students how to decide which strategy to select for use when encountering a problem in reading.
  - 0 – There is no mention that students will have to select a strategy to solve the problem (total absence of...).
  - 1 – The teacher mentions that this skill can be used to solve a problem, but provides no additional information.
  - 2 – The teacher mentions that this skill can be used to solve a problem and provides some information about how to choose the appropriate strategy.
  - 3 – The problem situation is explicitly specified and how to select an appropriate strategy is emphasized, but it is not an exemplar.

- 4 – The teacher provides an exemplary statement of how to recognize that a problem exists and how to select the appropriate strategy.
4. Rate how explicit the teacher is in telling students how to perform the strategy to solve the problem when reading real text.
- 0 – There is no explanation of how to perform the strategy (total absence of...).
  - 1 – There is an explanation, but it is stated as a rule to be memorized or as a procedure to be recalled, and no example is provided.
  - 2 – The teacher talks about the rule and/or procedure as a routine to be applied without variation, and examples are provided.
  - 3 – The teacher shows students how to follow mental steps and a sequence in a flexible, adaptive manner, but it is not an exemplar.
  - 4 – The teacher provides an exemplary description in which the teacher shows students how to follow mental steps and a sequence flexibly and adaptively when performing the strategy.

#### The Means to Present the Information

1. Rate how explicit the teacher is in introducing the lesson.
- 0 – The teacher makes no introductory statement or overview statement regarding the lesson (total absence of...).
  - 1 – The teacher makes an introductory or overview statement about what is to be learned, but does not mention why or how.
  - 2 – The teacher makes an introductory or overview statement about what is to be learned and either why or how (but not both).
  - 3 – The teacher makes an introductory or overview statement that includes information about what, why, and how, but it is not an exemplar.
  - 4 – The teacher makes an exemplary introductory or overview statement about the strategy to be learned, the “real text” situation in which it will be applied, and what to attend to when using it.
2. Rate how explicit the teacher is in modeling for students the mental steps in identifying the problem, selecting the strategy, and applying the strategy.
- 0 – The teacher does not model how to do the task at any point in the lesson (total absence of...).
  - 1 – The teacher models procedural use of a rule.
  - 2 – The teacher models the steps to be followed as a procedure but does not make the invisible visible.
  - 3 – The teacher models mental steps in using the strategy adaptively (makes the invisible visible), but uses artificial text samples or otherwise is not an exemplar.
  - 4 – The teacher provides an exemplary model of how to use mental steps in applying the strategy adaptively to a sample of natural, connected text.

3. Rate how well the teacher shifts the instructional interaction from teacher regulation of the strategy to student control of the strategy.
  - 0 – The teacher does not provide any guided practice (total absence of...).
  - 1 – The teacher requires the students to provide answers to tasks which presumably call for the use of the skill (in a recitation or assessment mode).
  - 2 – The teacher moves from teacher regulation to student regulation, but the emphasis is on answers rather than student mental processing.
  - 3 – The teacher moves from teacher regulation to student control and emphasizes student mental processing rather than answers, but it is not an exemplar.
  - 4 – The teacher provides an exemplary series of trials which are characterized by increased student mental processing, by much teacher assistance early in the lesson, by teacher monitoring of students' use of mental processes, and by making reference to the monitoring of student responses in asking for subsequent responses.
4. Rate how well the teacher elicits responses which require students to verbalize how they arrived at their answers.
  - 0 – The teacher does not elicit student responses to the skill of the task (total absence of...).
  - 1 – The teacher elicits right answers and does not require students to state how they know the answer.
  - 2 – The teacher requires students to state how they got answers, but focuses on procedural recall rather than knowing how to get the answer.
  - 3 – The teacher requires students to explain how they got the answer but has individual students verbalize individual steps rather than having each student verbalize all the steps, or otherwise fails to be an exemplar.
  - 4 – The teacher's elicitations are exemplary, requiring each student to verbalize all the mental steps used in applying the skill strategically.
5. Rate how well the teacher brings closure to the observed lesson (or lesson segment).
  - 0 – There is no evidence of closure to the lesson (total absence...).
  - 1 – The teacher ends the lesson but makes no summary statement about the skill being taught.
  - 2 – The teacher makes a summary statement, but does not include all information (the "What," the "Why," and the "How")
  - 3 – The teacher ends the lesson with a summary statement about what was learned, why it was learned, and how to do it (but does so without student involvement or otherwise fails to be an exemplar).
  - 4 – The teacher provides exemplary closure by involving students in summarizing and/or in reviewing, or in using the skill strategically in natural connected text, or by reminding them that it is in such natural connected text that the skill will be used.

### Intra- and Interlesson Cohesion

1. Rate how successful the teacher is in bringing a sense of cohesion to the lesson.
  - 0 – There is no recognizable sequence or cohesion within the lesson (total absence of...).
  - 1 – The teacher's lesson has some evidence of a logical sequence, but there are frequent inconsistencies and breaks.
  - 2 – The teacher's lesson reflects a logical progression, but contains some inconsistencies or breaks in lesson focus or breaks in activity flow.
  - 3 – The lesson has structure, is consistent, is focused, and flows smoothly, but is not an exemplar.
  - 4 – The teacher provides a lesson which is exemplary in terms of internal structure, consistency, focus, and flow.
  
2. Rate how successful the teacher is in communicating a sense of cohesion with past and future lessons.
  - 0 – There is no recognizable connection to past and future lessons (total absence...).
  - 1 – The teacher refers to past lessons but makes no reference to future lessons, or refers to future lessons but makes no reference to past lessons.
  - 2 – The teacher refers to past and future lessons, but there is little evidence of cohesion.
  - 3 – The teacher refers to past and future lessons and achieves some cohesion across lessons, but it is no exemplar.
  - 4 – The teacher provides an exemplary lesson in terms of its cohesion across lessons.

## Appendix B

## The DeFord Theoretical Orientation to Reading Profile (TORP)

Name: \_\_\_\_\_

Directions: Read the following statements, and circle one of the responses that will indicate the relationship of the statement to your feelings about reading and reading instruction.

(select *one* best answer that reflects the strengths of agreement or disagreements).

- |  |    |   |   |   |    |
|--|----|---|---|---|----|
| 1. A child needs to be able to verbalize the rules of phonics in order to assure proficiency in processing new words.                                  | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 2. An increase in reading errors is usually related to a decrease in comprehension.  | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 3. Dividing words into syllables according to rules is a helpful instructional practice for reading new words.   | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 4. Fluency and expression are necessary components of reading that indicate good comprehension.  | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 5. Materials for early reading should be written in natural language without concern for short, simple words and sentences.                            | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 6. When children do not know a word, they should be instructed to sound out its parts.   | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 7. It is a good practice to allow children to edit what is written into their own dialect when learning to read.                                       | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 8. The use of a glossary or dictionary is necessary in determining the meaning and pronunciation of new words.   | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 9. Reversals (e.g. saying "saw" for "was") are significant problems in the teaching of reading.  | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 10. It is a good practice to correct a child as soon as an oral reading mistake is made.   | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |
| 11. It is important for a word to be repeated a number of times after it has been introduced to insure that it will become a part of sight vocabulary. | 1  | 2 | 3 | 4 | 5  |
|  | SA |   |   |   | SD |

12. Paying close attention to punctuation marks is necessary to understanding story content.	1	2	3	4	5
	SA				SD
13. It is a sign of an ineffective reader when words and phrases are repeated.	1	2	3	4	5
	SA				SD
14. Being able to label words according to grammatical function (nouns, etc.) is useful in proficient reading.	1	2	3	4	5
	SA				SD
15. When coming to a word that is unknown, the reader should be encouraged to guess upon meaning and go on.	1	2	3	4	5
	SA				SD
16. Young readers need to be introduced to the root form of words (run, long) before they are asked to read inflected forms (running, longest).	1	2	3	4	5
	SA				SD
17. It is not necessary for a child to know the letters of the alphabet in order to learn to read.	1	2	3	4	5
	SA				SD
18. Flashcard drills with sightwords is an unnecessary form of practice in reading instruction.	1	2	3	4	5
	SA				SD
19. Ability to use accent patterns in multisyllable words (pho'to graph, pho to' gra phy, and pho to gra' phic) should be developed as part of reading instruction.	1	2	3	4	5
	SA				SD
20. Controlling text through consistent spelling patterns (The fat cat ran back. The fat cat sat on a hat) is a means by which children can best learn to read.	1	2	3	4	5
	SA				SD
21. Formal instruction in reading is necessary to insure the adequate development of all the skills used in reading.	1	2	3	4	5
	SA				SD
22. Phonic analysis is the most important form of analysis used when meeting new words.	1	2	3	4	5
	SA				SD
23. Children's initial encounters with print should focus on meaning, not upon exact graphic representation.	1	2	3	4	5
	SA				SD
24. Word shapes (word configuration) should be taught in reading to aid in word recognition.	1	2	3	4	5
	SA				SD

25. It is important to teach skills in relation to other skills.	1	2	3	4	5
	SA				SD
26. If a child says “house” for the written word “home,” the response should be left uncorrected.	1	2	3	4	5
	SA				SD
27. It is not necessary to introduce new words before they appear in the reading text.	1	2	3	4	5
	SA				SD
28. Some problems in reading are caused by readers dropping the inflectional endings from words (e.g., jumps, jumped).	1	2	3	4	5
	SA				SD

DeFord, D. (1985). Validating the construct of theoretical orientation in reading instruction. *Reading Research Quarterly*, 20 (3), 351-367.

## Appendix C

### Interview Protocol

1. Thinking back to the training, what are some activities that we did that you felt were really useful?
2. In what ways did they help?
3. What parts of the training did you find were not useful?
4. Can you think of any ways they could be adjusted to make them more useful?
5. Are there some things that you learned that you will use again in your teaching?
6. Which things?
7. How did you like working with other teachers?
8. Do you think the training would have been different if it was just one-on-one?
9. Did you find the videotaping to be helpful?
10. In what ways?
11. How did you choose the lessons you videotaped?
12. Anything you didn't like about using videotaping?
13. What suggestions do you have that would increase the effectiveness of the training.

## Appendix D

## Initial Meeting Agenda

TRAINING NOTES  
SESSION ONE

## WELCOME:

- History of me
  - a. School
  - b. Teacher
  - c. College
  - d. Current job
  - e. Dr. program

## RESEARCH PLAN

JANUARY:

1. Three videotapes of comprehension instruction
  - a. trained assistant and I will rate them to get a baseline

SHARE RUBRIC*FEBRUARY, MARCH, APRIL*

1. Two training sessions on explicitly teaching comprehension strategies.
  - a. we'll talk about several strategies: summarization, imagery, story grammar, question generation, question answering, prior knowledge
2. Weekly teacher logs: email them on Friday or Monday. (lesson plans?)

**SHOW IDEA**

- a. date and topic of lesson
- b. duration of lesson
- c. nuggets and lumps
- d. questions

3. Every two weeks: Videotape comprehension lessons: **SET UP PROCEDURES**

- a. videotapes will be rated by a trained assistant and me
- b. I will edit out some segments to watch during discussion groups

4. Once a month: Discussion groups: **SET UP TIME TO MEET (monthly)**

- a. use logs and video segments to discuss instruction
- b. ideas for future lessons

\*\*\*\*\***TODAY**: Take the DeFord TORP assessment

## Appendix E

### First Meeting PowerPoint

#### Comprehension Strategies Instruction

"The process of reading is not a half sleep, but, in highest sense, an exercise, a gymnast's struggle; that the reader is to do something for himself, must be on the alert, must himself or herself construct indeed the poem, argument, history, metaphysical essay - the text furnishing the hints, the clue, the start or frame-work."

Walt Whitman

#### Defining Reading Comprehension

•"intentional thinking during which meaning is constructed through interactions between text and reader." Durkin (1993)

•"Engaged readers interact with text, other ideas, and other people." Harvey & Goudvis (2007)

•"Comprehension is extracting and constructing meaning from text." Sweet & Snow (2002)

#### The Goals of Comprehension Instruction:

1. Get readers to think when they read.
2. Develop an awareness of their thinking.
3. Actively use the knowledge they have to comprehend text.

Weed Beater,  
Pick a weekend:  
May 25-26  
June 1-2.  
Fish Catcher

From: Owocki, G. (2003). *Comprehension: Strategic instruction for K-3 students*. Heinemann: Portsmouth, NH, p. 2.

#### The Strategies

- Prior Knowledge
- Imagery/Visualization
- Story Grammar/Structures
- Question Generation
- Question Answering
- Summarization

#### Reading Comprehension Instruction

1. Specific information about the strategy.
2. A clear lesson format with modeling and student practice.
3. A clear connection with other lessons.

**Indicators of Explicit Strategy Instruction**

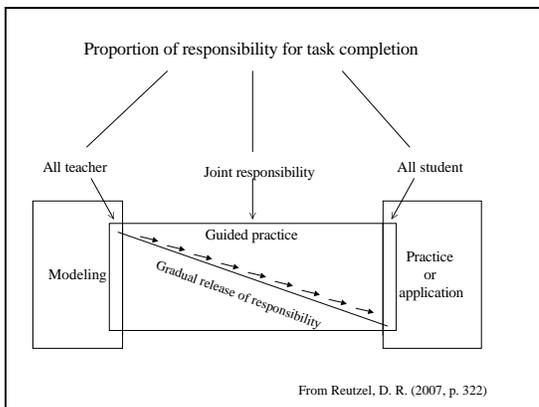
Present information about the usefulness of strategies.

- Explain how strategies can be used to make meaning when reading.
- Explain how strategies can be useful.
- Explain how to choose strategies to solve problems.
- Model the use of mental steps and flexible use of strategies.

**Indicators of Explicit Strategy Instruction**

Have a clear plan for the lesson.

- Introduce the strategy with “real” situations where it can be applied and what to attend to when using it.
- Model how to use mental steps in applying the strategy.
- Allow student practice which includes reference of strategy use and monitoring of student responses.
- Elicit students’ verbalization of all mental steps in using the strategy.
- Provide closure by involving students in the summary and review of the strategy use or the demonstration of usage.



I do  
We do  
You do

**Indicators of Explicit Strategy Instruction**

Develop cohesive lessons.

- Have focused and smooth lessons.
- Connect the lesson to other strategy lessons.

## Appendix F

### Strategy Resource Sheet: Visualization

#### *VISUALIZATION*

"As you muse over a poem, read a novel, or pause over a newspaper story a picture forms in your mind. Certain smells, tastes, sights, and feelings emerge, depending on what you're reading and what life experiences you bring to it. Information comes to you through your senses. This technique, which is called visualizing or creating mental or sensory images, triggers a wide range of memories and feelings," (Zimmerman & Hutchins, 2003, p. 18)

#### **TALKING ABOUT TEXT:**

- What did you see when you read those words? Does having this picture in your head make reading more fun? How?
- Where is that picture in your head coming from?
- Have your sensory images changed as you read this story? What words added detail to your mind picture?
- How does visualization help you understand, enjoy, or appreciate the text?

#### *ACTIVITIES*

##### **Two column chart:**

1. Label two columns: Facts (something we can see and observe) and Inferences (interpretation)
2. Read through nonfiction text and write down things they can see or observe from the reading and then what they can interpret from the information.

##### **Chart responses:**

1. Read a section of text and note the images that come to mind.
2. As a group, Chart responses.
  - a. Note their thinking.
  - b. Note types of words (adjectives, verbs) and think about how they might help make clearer images for the reader.

##### **Draw visual responses:**

1. Read a text out loud having students close their eyes.
2. As a group, discuss their images, explaining their thinking.
3. Have students make their own sketch of images.

## Appendix G

### Strategy Resource Sheet: Summarization

#### SUMMARIZATION

“The textual information that you access when you make connections among texts depends in part on your ability to remember them in summary form. In a sense, you carry a great deal of information around with you – probably thousands of text summaries on which you can draw to expand your thinking while reading.” (Fountas and Pinnell, 2006, pg. 48).

#### TALKING ABOUT TEXT:

- The most important ideas in this text are...
- This part was about...
- This book was about...
- First,...
- Next,...
- Then,...
- Finally,...
- The story takes place...
- The main characters are...
- A problem occurs when...

#### ACTIVITIES

##### **Problem/solution passage guideline:**

Sentence 1: tells who had a problem and what the problem is.

Sentence 2: tells what action was taken to try to solve the problem.

Sentence 3: tells what happened as a result of the action taken.

##### **Pattern for writing a summary:**

\_\_\_\_\_ had a problem because \_\_\_\_\_. Therefore, \_\_\_\_\_. As a result, \_\_\_\_\_,

**Main Idea Card:** Use the questions on the card to summarize the paragraphs or passage read. (Jitendra, et al., 2000, p. 130).

Does the paragraph tell:	
What or who the (Single or Group)	Subject is? Action is?
Why – something happened?	
Where – something is or happened?	
When – something happened?	
How – something looks or is done?	
Note: Some paragraphs may contain a sentence or two that don't tell about the main idea!	

**Sticky Notes for Expository Text:**

1. After each section of text, use sticky notes to write a summary.
2. Use short, concise sentences to summarize.
  - a. Pick out the most important ideas
  - b. Keep it brief
  - c. Say it in your own words in a way that makes sense

**Notes:**

1. After reading, think about the most important information.
2. Write single words to help you remember.
3. Put in all the rest of the words that are in your head.

**Bracketing in Expository Text:**

1. Use textbooks, copy a piece of expository text for each student, use Time for Kids, or other trade books
2. Bracket off a small section of the text
3. Write in their own words what that section meant

***Two-Column Chart - What's Important and What's Interesting (differentiating between interesting facts and key concepts)***

1. Label a two-column chart with What's Important and What's Interesting.
2. While reading, note things that are interesting and things that are important.
3. After reading, make a chart with what they believe to be important information.
4. Talk about writing a summary, decide what information is important enough to include in a summary - focus on KEEPING IT BRIEF. Some ideas are important, but some can be combined into one idea.
5. Together, write a summary.

Ideas from Harvey, S & Goudvis, A. (2007). *Strategies that Work*, 2<sup>nd</sup> Edition.

## Appendix H

### Strategy Resource Sheet: Prior Knowledge

#### PRIOR KNOWLEDGE

**“You might have heard the saying, ‘Things do not change, we change.’ That might not be true with everything, but it certainly is with reading. Background knowledge colors how people read. Readers can reread the same novel, poem, short story, or essay and have a very different reaction to it each time because of new and different life experiences in the interim.”**

**(Zimmerman & Hutchins, 2003, pg. 45).**

#### TALKING ABOUT TEXT:

- **As you read the passage, did anything remind you of your own life? How does thinking about what you already know help you understand this part of your reading?**
- **Look at all these connections you’ve made! Are there some that help you better understand these facts?**
- **How did remembering the last book you read in this series help you better understand this book?**
- **You’ve just described a memory related to these words. Could you see the scene in your mind? What do you notice about how our background knowledge creates mental images as we read?**
- **Background knowledge is like Velcro. It helps new information adhere.**
- **Activate what you know so that ideas and information will “stick” in your existing storehouse of information.**

#### ACTIVITIES

Three column chart: (a formula for inferencing)

1. **Using a piece of paper, have students make a three-column chart titled Background Knowledge, Text Clues and Inference or  $BK + TC = I$ .**

2. Students fill in information on the chart from the story.

Background Knowledge	Text Clues	Inference
Moms can get cranky when they are rushing to work in the morning.	She says no when he asks for a dog.	He has probably asked for a dog over and over.

Two column chart:

1. Label two columns **Facts (something we can see and observe)** and **Inferences (interpretation)**
2. Find specific information from the text to write in the facts column and then what we might infer from the information.

Facts (something we can see and observe)	Inferences (interpretation)
Apatosaurs are slow.	The T-rex will catch them.
Adults protect young.	The apatosaurs are plant eaters.
Bacteria decay the banana.	Bananas get rotten when you leave them out too long.

Making Connections:

1. As students read through text and they make a connection, they code it:
  - a. T-S = Text to Self; T-T = Text to Text; T-W = Text to World
2. Discuss connections that help them make meaning and connections that do not assist them with meaning making.

Prior Knowledge Activation and New Learning:

1. Make a three-column chart titled: **Questions, What We Think We Know, New Learning**
2. Before reading, have students fill in questions they have about the topic and things they think they know.

3. During or after reading, have students fill in any new learning that they have from the reading.

Questions	What We Think We Know	New Learning
Why does my heart beat?	Your heart beats.	Your heart helps you with your blood, it goes to each part of your body.
Why do I have blood?	If you don't have blood you would die.	Blood helps you fight your sickness. We have blood so that it can carry oxygen around your body so it can help you breathe.

Meaningful Connections:

1. Make a three-column chart with these headings: **My Connection, Important To Me, Important To Understanding.**
2. During or after reading, have students record their connection in the first column and then decide if it is important to the reader or important to understanding.

How Connections Deepen Our Understanding:

1. Share connections
2. Share how those connections help understanding

Ideas from Harvey, S & Goudvis, A. (2007). *Strategies that Work*, 2<sup>nd</sup> Edition.

## Appendix I

## TD Session #1 PowerPoint

## Elicit Student Responses of Their Mental Steps

1. During practice times, ask them HOW they got their answers.
2. Use questions like:
  - That is a fact. How did you know?
  - Super summary, can you tell us what you did to get that summary?
  - That was a really vivid picture you drew, what were you thinking about when you drew it?
  - How did you draw that conclusion?
  - What were you thinking about when you made that prediction?

## Modeling Mental Steps: Make the Invisible Visible

1. Give specific examples of how YOU “do” the strategy
2. Show them what you want them to do using text and YOUR thoughts.
3. Let them practice - making sure to ask them about their mental processes.

Focus on the following two pieces of the lesson:

- Model the use of mental steps and flexible use of strategies.
- Elicit student’s verbalization of all mental steps in using the strategy.

## Modeling Mental Steps: Make the Invisible Visible

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2. Show them what you want them to do using text and YOUR thoughts.
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## Elicit Student Responses of Their Mental Steps

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  - That was a really vivid picture you drew, what were you thinking about when you drew it?
  - How did you draw that conclusion?
  - What were you thinking about when you made that prediction?

## Appendix J

### Rating Scale Framework

### Lesson Plan Framework

#### Presenting the Lesson:

- Explain how strategies can be used to make meaning when reading.
- Explain how strategies can be useful.
- Explain how to choose strategies to solve problems.
- Model the use of mental steps and flexible use of strategies.

#### Clear Lesson Plan:

- Introduce the strategy with "real" situations where it can be applied and what to attend to when using it.
- Model how to use mental steps in applying the strategy.
- Allow student practice which includes reference of strategy use and monitoring of student responses.
- Elicit students' verbalization of all mental steps in using the strategy.
- Provide closure by involving students in the summary and review of the strategy use or the demonstration of usage.

#### Develop Cohesive Lessons:

- Have focused and smooth lessons.
- Connect the lesson to other strategy lessons.

Presenting the Lesson:

- Explain how strategies can be used to make meaning when reading.
- Explain how strategies can be useful.
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- Allow student practice which includes reference of strategy use and monitoring of student responses.
- Elicit students' verbalization of all mental steps in using the strategy.
- Provide closure by involving students in the summary and review of the strategy use or the demonstration of usage.

## Appendix K

## TD Session #1 Agenda

AGENDA

2-18-08

1. What is reading comprehension?
2. What does research say about comprehension instruction?
3. Lesson plan framework
4. Model strategies lessons (visualization)
5. Brainstorm strategies lesson ideas
6. Talk about journal entries.

Video-Taped Lessons

- Every two weeks
  - Feb. 25 – 29
  - March 10-14
  - March 24-28
  - April 7-11
  - April 21-25

Journal Entries

- Weekly
  - Date of lesson
  - Strategy taught
  - Nuggets
  
- Lumps/questions

## Appendix L

## TD Session #2 Agenda

## AGENDA

3-3-08

1. Review of last meeting
  - a. Comprehension instruction
  - b. Lesson formats
2. Video tapes
3. Modeling of summaries

**VIDEO-TAPED LESSONS:**

- Every two weeks
  - March 10-14
  - March 24-28
  - April 7-11
  - April 21-25

**JOURNAL ENTRIES**

- Weekly
  - Date of lesson
  - Strategy taught
  - Nuggets
  - Lumps/questions

## Appendix M

## TD Session #3 Agenda

## AGENDA

4-7-08

1. Nuggets and lumps
2. Making meaning with the strategies
3. Video segments
  - a. Cathy
    - i. Summarization
    - ii. Modeling, partnering
    - iii. Point out the strategy you are using and how it will help them when they summarize
  - b. Kendra
    - i. Five dollar bill
    - ii. Summarization with 2-column chart
      1. Move it from practice with you to practice in their independent reading times
      2. Discuss how this will help them make meaning
4. Final thoughts and questions
5. Video taped lessons
  - a. 2 in April: April 7 – 11 and April 21 – 25
  - b. First week in May

## Appendix N

### Example Spreadsheet

**Cathy**

#### RATINGS

##### A. Info Presented About the Strategy

	LESSON 1	2
Problem Solving	3	2
Usefulness	3	1
Choosing Strategies	2	0
Performance	2	1

##### B. Means to Present the Lesson

	LESSON 1	2
Intro.	1	2
Modeling Steps	2	0
Shift to Student	2	0
Elicits Responses	1	0
Closure	3	1

##### C. Intra- and Interlesson Cohesion

	LESSON 1	2
In Lesson	3	2
Past and Present	3	1

#### **RATING MATCH**

#### RATINGS

##### A. Info Presented About the Strategy

	LESSON 1	2
Problem Solving	3	2
Usefulness	3	1
Choosing Strategies	2	0
Performance	2	1

##### B. Means to Present the Lesson

	LESSON 1	2
Intro.	1	2
Modeling Steps	2	0
Shift to Student	2	0
Elicits Responses	1	0
Closure	3	1

##### C. Intra- and Interlesson Cohesion

	LESSON 1	2
In Lesson	3	2
Past and Present	3	1

		Lesson 1		Lesson 2	
		C	M	C	M
A. Info Presented About the Strategy	Problem Solving	3	1	2	2
	Usefulness	3	3	2	1
	Choosing Strategies	3	0	0	0
	Performance	2	2	1	1
B. Means to Present the Lesson	Intro.	1	2	2	2
	Modeling Steps	2	2	0	2
	Shift to Student	2	2	0	1
	Elicits Responses	2	1	0	1
	Closure	3	3	2	1
C. Intra- and Interlesson Cohesion	In Lesson	3	3	2	2
	Past and Present	3	3	1	1

## Appendix O

## Typology Chart

KENDRA

A. Information Presented about the Strategy

1. Rate how explicit the teacher is in informing students that the task to be learned is a strategy for solving a problem encountered in reading.

Baseline Ratings		Intervention Ratings		Teacher Discourse
B1	2			-“We’ve been talking all week about author’s purpose and point of view. What were the three things about the purpose? Why would they write something?” P1 -(repeats students response) “entertain, to inform and persuade” p1 -(Set of rules things to look for). “Try to get you to do something. Like try to get you to buy a car. And inform is just telling you about things. And entertain is telling you about their family, something to make you entertained like if you would be going to a movie. To entertain you.” p1
B2	2			
B3	2			-“We’re going to look at similes. A simile is a kind of figurative language and that is something that compares one thing to another. So we’re going to look at this and it’s comparing something to another something. Okay, and it’s going to give you a strong idea of what something is like. So here’s an example of a simile. Her heart was as big as a whale’s. Would you’re heart really be as big as a whales?”p1
		F1	1	
		M1	2	
		M2	3	
		A1	2	“Remember, the main idea is what it’s mostly about. Supporting details give more information about that main idea.” P1

		May 1	3	<p>-“The page that I have copied for you, we are going to use to talk about drawing conclusions. And we’ve talked a lot about drawing conclusions before. Remember when you draw conclusions, the author does not tell you exactly what they want you to know. They give you lots of ideas and you are supposed to draw your own conclusion about what has happened, or what they want you to think.</p> <p>So think of some times where you have had to draw conclusions. Let’s think about recess. We have two choices for recess. We can be inside or we can be outside. And without anybody telling us whether we are inside or outside we usually know. If it’s raining outside, what’s your conclusion?”</p> <p>Inside.          “Inside. If it is a beautiful, sunny day. 60 degrees, no rain, no snow, where are we going to be?”</p> <p>Outside          “Outside and we didn’t have to tell you that. You drew your own conclusion based off things you know, based off your experiences of what we have done in the past.” P1</p>
--	--	-------	---	--

2. Rate how explicit the teacher is in informing students that the strategy is useful as they read.

Baseline Ratings		Intervention Ratings		Teacher Discourse
B1	0			
B2	0			
B3	2			-“And it’s going to give you a strong idea of what something is like.” P1
		F1	0	
		M1	1	

		M2	3	-“When I read this article before I printed it off for you, that’s how I chose this article. I thought, okay, there are some interesting things in each paragraph and there are some important things in each paragraph. Some of these articles that I read were already summaries, so I chose this one because it will help you find out what’s important and what’s interesting about the new five dollar bill.” P1
		A1	0	-“What does support mean?” It helps. It is supporting you. p1
		May 1	3	-“So use those things, your personal experiences and the information that the text gives you to draw your conclusions for reading.” P3

3. Rate how explicit the teacher is in telling students how to decide which strategy to select for use when encountering a problem in reading.

Baseline Ratings		Intervention Ratings		Teacher Discourse
B1	0			
B2	0			
B3	0			
		F1	0	
		M1	0	
		M2	1	-“We are going to read this article about the new five dollar bill and summarize it by telling us what’s important and what’s interesting.” P1 -“I chose this one because it will help you find out what’s important and what’s interesting about the new five dollar bill.” P1 -“So the first paragraph when we read it, think about what’s important. How would I summarize it? And what are just some interesting things that might not help me make my main points into a summary?” p2
		A1	0	

		May 1	3	-“So, when you are reading. Anytime you are reading and the author doesn’t come out and tell you exactly what is going on, you have to draw conclusions based on your own experiences. Like you know we are going out to recess today, it’s not raining it’s not snowing and it’s sunny, so we will go out to recess today.” P3
--	--	-------	---	---