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A Qualitative Inquiry into One Teacher's Metacognitive Processes as They Influence Reading Instruction

Jennifer Antoniotti-Neal
Western Kentucky University, jaflowe@mchsi.com

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A QUALITATIVE INQUIRY INTO ONE TEACHER'S METACOGNITIVE
PROCESSES AS THEY INFLUENCE READING INSTRUCTION

A Dissertation Presented to
The Faculty of the Educational Leadership Doctoral Program
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

By
Jennifer Antoniotti-Neal

December 2016

A QUALITATIVE INQUIRY INTO ONE TEACHER'S METACOGNITIVE
PROCESSES AS THEY INFLUENCE READING INSTRUCTION

Date Recommended October 27, 2016

Sherry W. Powers
Sherry Powers, Chair

Pamela Petty
Pamela Petty

Antony D. Norman
Antony D. Norman

G. R. 12/1/16
Dean, The Graduate School Date

DEDICATION

This dissertation is dedicated to

My children

Seth, Noah, and Joshua

I love you more than life.

You have greatness in you.

Live your dreams and dare to be more.

My husband, Lee

You are the love of my life.

I thank God every single day for you.

My parents

Your example, expectations, and intelligence have enabled me to be all that I am.

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A QUALITATIVE INQUIRY INTO ONE TEACHER'S METACOGNITIVE
PROCESSES AS THEY INFLUENCE READING INSTRUCTION

Jennifer Antoniotti-Neal

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Directed by: Sherry Powers, Pamela Petty, and Antony D. Norman

Educational Leadership Doctoral Program

Western Kentucky University

Despite over 40 years of research on the importance of metacognitive strategy instruction for increased student reading achievement, minimal research has been conducted to explore teacher's explicit awareness of their metacognition and their ability to think about, talk about, and write about their thinking (Block & Pressley, 2002). Therefore, this qualitative case study investigates one teacher's understanding of metacognitive awareness and missed opportunities for metacognitive comprehension strategy instruction in a reading classroom. One fourth-grade reading teacher from a proficient rural elementary school participated in this study. The data analysis results suggest that the participant's metacognitive knowledge was limited and comprehension strategy instruction was not evident during the two-week study. The results reveal a disconnect between teacher metacognitive awareness and actual classroom practices.

CHAPTER I: INTRODUCTION

Knowledge of literacy instructional strategies used to improve student achievement has increased dramatically over the last 40 years (Block & Pressley, 2002; Durkin, 1993; Harvey & Goudvis, 2007; Marzano, 2007; Paris, Lipson, & Wixson, 1983; Pressley & Harris, 2008/2009). However, students across the United States scored below average in reading comprehension based on state achievement testing and classroom observations. According to the 2015 National Assessment of Educational Progress (NAEP), only 36% of students in Kentucky scored at or above reading proficiency levels. The remaining 64% of Kentucky public school children scored below basic reading proficiency levels. According to the NAEP, these scores were not significantly different from the last nine years of data collected. This trend is analogous to student achievement across the nation, as national scores indicate that 34% of American public school students achieved proficiency in reading on state mandated assessments.

Comprehension strategy instruction is an essential component of literacy curriculum. Researchers have concluded, “the most important thing about reading is comprehension” (Block, Gambrell, & Pressley, 2002, p. 3). “The academic benefits of explicit reading comprehension instruction in elementary grades are well-documented” (Ness, 2011, p. 99). Recent multiyear studies by Cummins, Stewart, and Block (2005) have revealed that, after eight weeks of deliberate comprehension instruction, students are able to apply these strategies regularly. Deliberate strategy instruction is necessary for student reading achievement.

According to Schmoker (2007), the majority of literacy instruction that occurs in the elementary classroom consists of color and cut-and-paste activities and lacks

authentic learning experiences in which students use higher order thinking skills to apply prior knowledge and new strategies to a text. A study by Duffy, Lanier, and Roehler (1980) confirmed Dolores Durkin's (1978-1979) findings, stating that teachers failed to teach, model, explain, or demonstrate strategies for text comprehension. Rather, teachers assigned activities, supervised, and monitored student time on task.

Theoretical Framework

Metacognitive theories are systematic frameworks used to understand, to explain, and to guide metacognitive knowledge and regulation. Metacognitive strategy instruction is an essential component of an effective literacy program. However, a disconnect occurs between teacher perceptions of metacognition and actual classroom practice. Many factors contribute to this problem. First, "The professional knowledge base for teaching consists of: subject matter, content knowledge, knowledge of the learner, knowledge of educational aims, knowledge of curriculum and general pedagogical knowledge" (Shulman, 1987). If one or more of these components are deficient, the chances of a negative effect on student achievement increases. Second, pre-service and professional development opportunities for teachers lack explicit connections between metacognitive awareness and teacher practice. Therefore, metacognitive knowledge and regulation are not priorities for pre-service and in-service teachers.

Metacognitive strategy instruction research proposes that comprehension success is deeply rooted in quality literacy instruction. The ability to monitor one's thinking is cited as a fundamental attribute of expert readers (Block & Pressley, 2002; Duffy, Roehler, Sivan, & Rackliffe, 1986; Wilson & Bai, 2010). Yet, reading comprehension remains a struggle for many students.

Research has suggested through purposeful instruction of metacognitive comprehension strategies that students can acquire increased understanding of text (National Reading Panel, 2000). Studies have documented the increase of student achievement in literacy due to deliberate strategy instruction. Marzano (2000) cited approximately 400 research studies and determined metacognition to be critical for student learning. The National Reading Panel identified 20 instructional studies that suggested comprehension monitoring can be taught and can increase student understanding of text. Consequently, “metacognition is essential to successful learning because it enables individuals to better manage their cognitive skills, and to determine weaknesses that can be corrected by constructing new cognitive skills” (Schraw, 1998, p. 123). Therefore, explicit strategy instruction provides opportunities for increased reading achievement.

Nonetheless, both novice and experienced teachers encounter difficulty in deliberately teaching metacognitive strategies due to the lack of quality modeling from teachers during their own education and college reading methods classes. Pre-service teachers are expected to learn from experts in their field and then switch to metacognitive teaching when they become in-service teachers. This requires novice teachers to substitute a different mental model than that which was learned during teacher training. Doing so is a difficult proposition. The development of metacognitive teachers must begin at the pre-service level. However, the current expectation is not that teacher candidates will be fully metacognitive as a first-year teacher; they will possess the propensity toward strategic thinking and will end up in a teaching situation that allows them to be metacognitive (Israel, Block, Bauserman, & Kinnucan-Welsch, 2005).

Rationale and Significance of the Study

The rationale for this study is to collect and analyze data to determine whether teachers develop an awareness of their own metacognitive practices and whether that awareness affects deliberate strategy instruction. Research carried out between 1960 and 1980 has indicated that individuals can learn to activate metacognitive comprehension. Research has suggested that teachers who model methodical comprehension strategy instruction have students that are more likely to develop and to sustain metacognitive skills (Duffy et al., 1986). However, minimal research exists that examined whether and the manner in which metacognition is actually taught as a part of daily reading comprehension instruction. Despite empirical evidence demonstrating the value of metacognitive instruction to increase reading comprehension, direct teaching of metacognitive reading strategy instruction remains absent in literacy classrooms (Pressley, 2005). Although much research has supported the effectiveness of planned comprehension strategy instruction, many primary and upper elementary students continue to struggle with reading comprehension (Pressley, 2006). Therefore, studies are needed to provide insight into the occurrence of this deficit occurs in classroom practice.

Educators agree that teachers who use more deliberate comprehension strategy instruction have students more likely to develop and to sustain metacognitive skills (Keene & Zimmerman, 2007). While copious amounts of research exist on comprehension instruction, little research has been found on the amount of deliberate metacognitive strategy instruction occurring inside America's classrooms (Pressley, 2005). This study examined teacher awareness of metacognition, authentic

comprehension instruction, and missed opportunities for metacognitive training during reading instruction.

Research Questions

1. How is a teacher's metacognitive awareness evident during classroom reading instruction?
2. What (if any) deliberate metacognitive strategy instruction opportunities are missed when literacy instruction is transpiring in the classroom?

Overview of Methodology

This qualitative study attempts to gain a deeper understanding of elementary school reading teachers' metacognitive awareness levels in reading classes and whether their own level of metacognitive awareness translates to deliberate classroom reading comprehension instruction. This study endeavors to identify specific factors that limit implementation of research-based metacognitive comprehension strategies in their classrooms.

The research method is a case study, a form of qualitative research in which the investigator is the primary instrument for data collection and analysis. Qualitative research helps to explain and to understand the meaning of social phenomenon within a natural setting. "This type of research builds abstractions, concepts and theories rather than testing an existing theory" (Merriam, 1998, p. 7). The characteristics of a case study research method include the investigation of a single individual, group, or event (Wiersma & Jurs, 2009). In this study, the teacher selected is observed in her respective classroom. This study focuses on issues of metacognition, comprehension, and awareness. Due to the researcher's expertise in literacy as a former national board

certified teacher of literacy, the focus of observations and data collection centers around teacher awareness and modeling of metacognitive strategies during literacy instruction, specifically comprehension strategy instruction.

Observations will be conducted in February and March. Due to the qualitative nature of this study, interview, observation, and reflective journal data will be collected. The tools of note taking, descriptive field notes, reflective journals, and interpretations of observations will be utilized as the primary forms of data collection. The number of observations will be 12 consecutive days conducted during a complete literacy unit. The researcher will attend the first and last observations with video recordings of each. The teacher and/or the curriculum coordinator will videotape lessons 2 through 11. Each observation will be 60 minutes in length per visit/video recording. Observations will occur during the teacher's morning literacy block. Various reading instructional strategies will be witnessed, while searching specifically for metacognitive comprehension strategy instruction and missed opportunities during the literacy block for such instruction.

Data analysis will occur after interviews and field observation notes were transcribed. A coding system is utilized, based on the created spreadsheet prior to classroom observations. Emerging patterns during the data analysis process will be examined as they relate to metacognitive awareness and comprehension strategy instruction. The themes that surface will be applied to the research questions.

Limitations of the Study

The results and conclusions of this study are based on observations of only one elementary school teacher in a proficient Kentucky school during literacy instruction. The small sample size, the qualitative design, and the brief period spent in each classroom

limits the generalizability of the study to the larger population. The amount of time spent in this literacy classroom represents only a small portion of the entire reading curriculum taught.

CHAPTER II: REVIEW OF THE LITERATURE

History of National Education Reform

One of today's most focused educational issues involves the readiness of high school students for college programs that will prepare them for a competitive international workforce. This reform began in the 1950s when the nation's priorities shifted to students' abilities to compete globally in math and science. Educational reform continued to evolve with a report by The National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform*, focusing on economic rather than military concerns (Gardner & National Commission on Excellence in Education, 1983). Race, gender, socio-economic status, linguistics and student ability were the focus of this educational restructuring.

President Bill Clinton utilized this reform to promote the voluntary adoption of statewide standards and assessments to serve as benchmarks for all student progress. President George W. Bush created legislation entitled "No Child Left Behind" that introduced the possibility of federal sanctions upon schools and districts based on poor performance on annual statewide examinations in grades 3-8 (U.S. Department of Education, 2008b). President Barack Obama introduced a re-authorization of Lyndon Johnson's Elementary and Secondary Education Act of 1965 (ESEA) encouraging states to move toward "Common Core Standards." The central goal of the ESEA is graduating all students "college and career ready." According to the U.S. Department of Education (2008a), content knowledge is inadequate; students must leave school equipped with the ability to learn and to solve problems. To accomplish this, states are required to set clear expectations on effective teaching with assessment systems identifying those teachers.

Literacy Goals

In light of the political shift focusing on education reform, there is an abundance of research exists on the necessity for students to possess strong literacy skills. Common Core State Standards (CCSS) for literacy goals begin in the elementary school with deliberate and planned teaching of strategies. One CCSS goal is for teachers to devote adequate time directly to the teaching of reading and writing (Common Core: State Standards Initiative website, 2010). An effective method to increase student reading achievement is to purposefully teach metacognitive strategies (Archer & Hughes, 2011; Durkin, 1993; Gunning, 2005; Israel et al., 2005).

An additional CCSS literacy goal is to provide engaging instruction in a supportive environment (Common Core State Standards Initiative website, 2010). Keene and Zimmerman (2007) believed that exceptional teachers appreciate the benefits of students' developmental awareness of the way in which they learn successfully. Flavell's 1979 work led to understanding the most effective way each individual learns, knowing the most effectual way each learner approaches a given task, monitoring one's own understanding and evaluating one's own progress. Research offers the idea that most learners succeed when they experience new material in a multisensory way (Block et al., 2002). Therefore, when teachers understand their own way of learning, they are more able to provide students with purposeful and authentic reading and writing tasks.

A third literacy goal is to employ well-prepared and supported teachers at all levels who have a deep understanding and knowledge of the latest research and processes needed to teach students to read and to write in all content areas (Common Core: State Standards Initiative website, 2010). Teachers in the past have conducted traditional

practices in their classroom that they believed to be comprehension instruction. In fact, these classroom exercises were covert assessments. Currently, research has shown that even though deliberate strategy instruction is highly effective, most teachers deal with tangible aspects rather than cognitive training because they are unaware of strategies they employ while reading (Wilson & Bai, 2010).

With a lack of a clear curriculum for teaching metacognitive strategies, a gap exists between research and authentic instructional metacognitive practices in classrooms today (Lesley, Watson, & Elliot, 2007). Research is now clear that instruction “involves a constant ongoing adaptation of many cognitive processes” (Block et al., 2002, p. 39). Metacognitive strategies, the methods teachers employ to learn, are deliberately and explicitly shared with students during literacy instruction.

Reading Performance of the Nation’s Students

Beginning in 2010 each state independently made the decision to adopt Common Core State Standards that call for building a foundation for college and career readiness. Students’ reading success is measured in the knowledge and mastery of challenging literary and informational text. The Common Core State Standards require curriculum that is “intentionally and coherently structured to develop rich content knowledge within and across grades” (Common Core State Standards Initiative, 2010). Yet, over half of the nation’s schoolchildren perform far below proficiency levels in reading comprehension. The 2013 National Assessment of Educational Progress (NAEP) reported that 65% of fourth graders and 64% of eight graders scored below basic proficiency levels in reading, which is an increase of only 7% for both fourth and eighth grade scores since 1992 (NAEP, 2013). Students’ poor reading comprehension is linked to their ineffective use of

metacognitive strategies. Struggling readers have not developed the skills needed to disassemble complex literary and informational texts (Israel et al., 2005; Joseph, 2010; Lesley et al., 2007; Wiley, Griffin, & Thiede, 2005).

Metacognition

Tremendous gains have been made over the last 40 years of research presented to the field of education on the importance of metacognitive awareness and its influence on reading comprehension. While the research continues to strengthen teachers' understanding of reading processes and the ideas behind reading achievement, many students in Kentucky and across the country continue to demonstrate low levels of achievement.

Traditional practices in reading comprehension have included the idea that teachers provide reading instruction, often reading a text and asking questions to check student comprehension. Common practices expected students to glean and to apply comprehension concepts during lessons. When asked, teachers thought they were teaching comprehension strategies to students when, in actuality, they were questioning students as a form of assessment to check for understanding. In the 1980s an educational shift occurred, in which the use of literature replaced basal readers. After this shift, instruction efforts were overlooked and teachers focused their efforts on fluency and comprehension assessment (Durkin, 1993). In 1983 The Public Education and Business Coalition (PEBC) was founded, a nonprofit partnership of Colorado education and business leaders. This group of educators identified many students in surrounding areas who developed fluent reading habits, indicating they were proficient at using decoding strategies. Yet, these same students who appeared to be exceptional readers failed to

comprehend that which they read. PEBC found that teachers used comprehension activities to assess the information children remembered from their reading but also found that student knowledge rarely was increased when these activities were completed (Keene & Zimmermann, 2013). This group of teachers began to understand the need to articulate and to focus instruction on the mental processes that underlie reading (Keene & Zimmermann, 2007). The movement in the 1980s and 1990s caused teachers to become more reflective of their own reading and led to an abundance of research targeting specific strategies employed by proficient readers to understand while they read.

History of Metacognitive Theory

Effective teachers' thoughts are focused, determined, and purposeful. Positive reflection focuses on making systematic, evidence-based decisions that eliminate assumptions from the decision-making process to develop effective teaching habits. Research has revealed that effective problem solvers possess highly developed metacognitive skills. They are able to identify errors or gaps in their thinking, articulate their thought processes, and amend their actions to produce desired results (Brown, Bransford, Ferrara, & Campione, 1983). As Dewey observed as early as the 1930s, teachers continuously reflect on instruction and its effect has on student learning. Teaching professionals engage in these metacognitive thought processes daily as they work to improve instructional efficacy. Teachers who are aware of their own metacognitive skills utilize them more proficiently and with much less effort than those who use them but are unaware that they do so.

A wide body of metacognitive research exists that is deeply embedded in quality literacy instruction. Metacognition is defined as an awareness or analysis of one's own

cognitive processes (Block & Pressley, 2002). Flavell (1979) introduced metacognition to the field of psychology in the early 1970s as the process of thinking about one's thinking. As an American developmental psychologist specializing in children's cognitive development, Flavell used the discoveries and work of Jean Piaget to shift the direction of developmental psychology in the United States. He conducted extensive research in metacognition and theory in the mind of the child, building upon Binet's intelligence testing and Piaget's theory of cognitive development. Piaget demonstrated children's abilities to verbalize the processes they used when they completing a certain task and their awareness of their own thought processes to verbalize internal thoughts as they complete assignments.

Flavell (1979) identified the importance of metacognition in cognitive monitoring during reading comprehension. His work also suggested that the reason students failed to recall information from texts was due to a lack of the awareness of their own cognitive ability (Flavell, 1979). Therefore, understanding the manner in which to effectively apply a comprehension strategy is equally as important as knowing the strategy to use and when to use it. When teachers possess a conscious awareness of their own knowledge and their own processes of comprehension, regulation, and direct their thinking, they instinctually employ metacognitive strategies to monitor their attention to derive meaning and to make modifications to their thinking when misunderstandings occur.

Metacognitive Development and Awareness

Research has varied with respect to the point at which students develop metacognitive awareness. Flavell (1979) created a timeline that correlates with Piaget's stage of formal-operational thinking. His research stated that, when children are able to

reach this stage of development, they can obtain a metacognitive perspective. In a study of grades 3 and 5 students, “Children exhibited excellent metacognitive resolution when asked to make delayed judgments of learning” (Metcalfe & Finn, 2013, p. 19).

Educational researcher Robert Marzano (2000) reviewed nearly 400 research studies and concluded that metacognition is an essential modality for student learning.

In 1979 Flavell divided metacognition into two fields: knowledge: awareness of one’s own thinking and regulation: the ability to manage one’s own thinking processes. Metacognitive knowledge enables teachers and learners to have awareness and control over their thinking, in order to acquire and to employ strategies that engage effective change in scholarship (Hartman, 2001). Metacognitive knowledge can be experiential or retrieved knowledge and will be different for each learner. Metacognition is described as the conscious awareness of one’s own knowledge and the ability to understand, control, and manipulate those cognitive processes. It is the study of memory monitoring, self-reasoning, and awareness. This is the process in which knowledge and regulation intersect. Once individuals become cognizant of their thinking, they are more prone to recognize and to regulate those processes.

Metacognitive Knowledge

Researchers have studied metacognition for over 35 years. Most have agreed that cognition and metacognition are two different studies. Cognitive skills are essential for carrying out tasks, while metacognitive skills are necessary for determining the completion of those tasks. Metacognition is understood by most researchers to consist of metacognitive awareness and metacognitive regulation. Metacognitive knowledge is broken down into three subcategories as it relates to metacognitive awareness: (a)

Declarative knowledge: the learner's knowledge of factors that influence learning or "world knowledge"; (b) Procedural knowledge: the learner's knowledge about the processes and strategies employed while performing tasks; and (c) Conditional knowledge: knowledge the learner accrues to employ declarative and procedural knowledge at appropriate times and the purpose for choosing each strategy (Schraw, 1998). "As the children's knowledge of cognitive processes, strategies, and task variables expands during the early school years, integration of this knowledge instigates the formation of metacognitive conditional knowledge" (Mayer & Alexander, 2011, p. 201). According to Zohar (1998), the assumption is made that teachers possess metacognitive knowledge of thinking skills because it is essential (a) for introduction of metacognitive activities in a classroom, (b) for designing and planning high quality learning experiences based on the process requiring thinking about thinking skills as the explicit goal, and (c) for the systematic teaching of higher order thinking. Research has suggested that teachers possess critical understanding as a basis for professional knowledge in the following areas: subject and pedagogical content knowledge, knowledge of learners, knowledge of curriculum, knowledge of educational goals, and general pedagogical knowledge (Shulman, 1987).

Metacognitive Regulation

Researchers have cited that the teaching of study strategies is among the most common approaches to teach metacognitive skills (Hartman, 2001). When students are asked to think about their own thinking, they learn to become aware of their own processes, strengths and limitations. Once metacognitive awareness is established, they are capable of directing that learning in three ways: (a) Planning: learners select the

correct strategy and set aside resources to perform the task well; (b) Monitoring: occurs during the learning process in which one self-tests and revises effectiveness of strategy use; and (c) Evaluating: assessing the effectiveness of learning outcomes (Schraw, 1998).

Metacognition and Comprehension

Numerous researchers and theorists have recommended that learners, particularly struggling readers, receive reading strategy instruction, including metacognitive teaching (Harvey & Goudvis, 2007; Joseph, 2010; Pressley & El-Dinary, 1997; Wiley et al., 2005). Pressley, Wharton-McDonald, Mistretta-Hampston and Eschevarria (1998) found that, for students, reading more text does not increase comprehension. The reader must use at least one comprehension strategy to see an increase in understanding. Students who were equipped with a variety of comprehension strategies improve their understanding significantly. Readers use clues, hints, prior knowledge, cultural experiences, and various other strategies to create a framework for understanding the text being read. Comprehension is a continuous and complex endeavor that is productive and rewarding for strategic readers (Duke & Pearson, 2002; Block et al., 2002).

A study by Pearson and Gallagher (1983) identified core strategies needed by students to become proficient readers. Those who make connections, rely upon their prior knowledge, create mental images by visualizing, make inferences, ask questions to determine important information, and summarize and synthesize information in the text are attentive and skillful readers.

Pressley and Afflerbach (1995) evaluated over 40 verbal protocol studies and documented the metacognitive strategies employed by proficient while reading. Resulting analysis indicated that skilled readers intentionally process new information before,

during, and after reading. They set purposes for reading, make predictions, connect prior knowledge to text, and summarize and evaluate the quality of the text while repairing broken comprehension to clarify meaning (Block & Pressley, 2002).

Metacognition and Comprehension Strategies

Strategies are defined as, “knowledge of procedures, knowledge about how to do something” (Pressley & Harris, 2008/2009, p. 77). Metacognitive strategy concepts emerged between the early 1950s and late 1970s through focused research in the areas of human information processing. Effective readers interact with the text as they read. The goal of comprehension strategy instruction is to motivate readers to think as they read, develop an “awareness” of their thinking, and actively use the knowledge they acquire (Harvey & Goudvis, 2007).

Core reading comprehension strategies agreed upon by leading literacy experts include monitoring comprehension; activating and connecting background knowledge; and questioning, visualizing, inferring, summarizing, and synthesizing (Block & Pressley, 2002; Durkin, 1993; Gunning, 2005; Paris et al., 1983, Pearson & Gallagher, 1983). Monitoring comprehension is the process of supervising one’s own comprehension, which is the origin of the term thinking about one’s own thinking.

The monitoring strategy is applied when students need to halt automatic reading and attend to print due to a struggle with meaning. The need to employ other strategies arises (Durkin, 1993). Activating and connecting background knowledge is a critical step in the comprehension process. Activating prior knowledge is defined as “knowledge and experience that readers bring to a text” (Harvey & Goudvis, 2007, p. 29). It also is referred to as background knowledge or schema.

Questioning is a strategy often misunderstood by teachers; they employ it to ask students questions of the text. In reality, Harvey and Goudvis (2007) expanded on this concept reiterating all readers, including adults, have questions. There are many purposes for questions during reading: (1) Some questions will be answered when reading the text; some will not; (2) Information may be gained through questioning during reading. Questions can be open for discussion and many will become a springboard for further research; (3) At times reading is completed to answer questions that are posed. It gathers information to answer specific questions; and (4) Reading with a question in mind is a new purpose concept for many teachers and students and can be extremely personal and effective. Questioning then becomes a much more authentic comprehension strategy (Block & Pressley, 2002; Harvey & Goudvis, 2007).

Visualizing is a strategy most teachers assume students can utilize without instruction. Not all students understand the process of making an image appear inside their minds when they hear or read a story or text without deliberate instruction. Imaging is described by Gunning (2005) as, “Creating a visual, auditory or other sensory-based mental representation of characters, objects, events or other elements in a selection” (p. 376). An advantage of using this strategy is that students are immersed in the text; therefore, they are more likely to engage in deep processing. Inferring pertains to the reader/listener drawing a mental conclusion by adding their own knowledge to facts and information presented by the story.

Readers and listeners use inferential strategies to understand that which is not explicitly stated in the text. They then make their own discoveries without direction from the author (Durkin, 1993; Harvey & Goudvis, 2007; Tompkins, Guo, & Justice, 2013).

Summarizing is paraphrasing essential information, while synthesizing requires readers to view the whole or larger idea being presented by the text. Readers move from summary to synthesis while reading. They process facts by recalling and retelling (summary) to move to deeper processing strategies (synthesis) of sifting through large quantities of information to find themes, main concepts, or patterns that emerge (Block & Pressley, 2002; Harvey & Goudvis, 2007; Pearson & Gallagher, 1983).

“Modeling and teaching developmentally appropriate metacognitive skills to young children can greatly enhance their abilities to acquire early literacy skills and empower them to become problem solvers and independent readers,” (Israel et al., 2005, p. 10). Researchers have believed that it is now appropriate for students to read slowly with focus and for depth of meaning (Keene & Zimmermann, 2013). Citations exist in many studies that children significantly benefit from effective comprehension instruction when deliberately taught such strategies metacognitively (Block & Pressley, 2002; Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007; Ness, 2011; Wiley et al., 2005).

Metacognition, Comprehension, and Literacy Instruction

The goal of metacognitive literacy is that students develop metacognitive knowledge and self-regulatory behaviors when engaged in literacy activities. As metacognitive research originates in comprehension studies, various instructional strategies focus on supporting reading comprehension (Israel et al., 2005). From 1977 through 2007 Pressley was involved in many studies that led to the foundation of scientifically-based theory to advance the field of literacy known today (Block, 2008). During the 1970s many researchers believed that young students could not process text on a metacognitive level. As early as 1983 Pressley provided research that even students

as young as second grade can employ metacognitive strategies (Block, 2008). Two landmark studies (Paris, Cross, & Lipson, 1984; Pressley et al., 1992) involved metacognitive reading strategies taught to elementary students. Teachers used a scaffolding approach to thoughtfully teach reading strategies, paying close attention to the declarative, procedural, and conditional knowledge of each (Nash-Ditzel, 2010). Research has suggested that metacognitive monitoring funnels to a specific comprehension strategy in order for learners to examine and to attempt to correct any broken understanding of that which is being read or heard. It is imperative that teachers implement effective metacognitive strategy instruction rather than isolated skill instruction.

Metacognition and Teacher Effectiveness

Determining the measure of a teacher's effectiveness in the classroom appears to be a challenging task in a nation immersed in high-stakes testing. In 2005 the Kentucky Department of Education; Harvard University; the Wallace Foundation; and Jefferson, Daviess, Boone, and Kenton Counties in Kentucky created a partnership entitled the Executive Leadership Program for Educators to bring high quality teaching and learning to a measurable scale (Kentucky Department of Education, 2015). The partnership resulted in a comprehensive list of components of highly effective teaching and learning, including but not limited to learning climate, classroom assessment and reflection, instructional rigor and student engagement, and knowledge of content. A highly effective teacher is sufficiently flexible to implement these criteria in any learning situation to increase student reading achievement, regardless of race, gender, socioeconomic status, culture, or linguistic background (Killian & Wilkins, 2009; Marzano, 2007; Moore, 2005;

Schmoker, 2011). A measurable scale has been implemented by the Kentucky Department of Education to measure effective teacher practices.

Metacognition and Effective Teaching Practices

Various effective teaching practices target an increase in student reading achievement. Creating a positive, safe learning environment in which students feel free to make mistakes and to take risks is a hallmark of a highly effective teacher's classroom. Teachers reading aloud to students and making mistakes naturally provides an example of effective modeling used to create an atmosphere of safety and security in the classroom. The effective teacher will discontinue reading and discuss with students that good readers monitor their understanding, using metacognitive and comprehension strategies simultaneously while they read. Students need to realize when something does not make sense; they should re-read and correct their understanding (Keene & Zimmermann, 2007; Moore, 2005). When teachers model and encourage ways to correct mistakes, students feel comfortable and are apt to take risks.

High quality teachers use classroom assessment and reflection pieces to communicate growth to students and parents. Also, these literacy practices can be used to increase depth of students' knowledge subsequent to assessments (Gunning, 2005; Pressley, 2006). In this instance, after an assessment is given, teachers use the data to conduct post-reading reflection and analysis. During these instructional sequences, an effective teacher provides opportunities for students to review assessments, ask questions, look for patterns, and correct misunderstanding. Today many teachers continue to assess students' work, write a brief comment, and return the work for them to share with parents. This is a missed opportunity for teachers to increase student depth of knowledge

and reflective abilities. Highly effective teachers continue reflection by providing students with time to reflect, in writing, on their thought processes, assessments, and comprehension (Stiggins, Arter, Chappuis, & Chappuis, 2006).

Research has been conducted to provide evidence of the most effective instructional teaching strategies for use with students. Researchers have cited the interdependence of effective instructional practice and of caring and trustful relationships between teachers and students. Successful teachers show interest in the students' experiences and cultural backgrounds (Lindsey, Karns, & Myatt, 2010). An effective classroom teacher provides opportunities for students to read; write; and share ideas about their home, thoughts, feelings, and interests. Quality literacy instruction builds upon students' prior knowledge, values, and experiences. Students are most successful their teachers activate prior knowledge and build background knowledge to place new learning into context (Coppola & Primas, 2009; Harvey & Goudvis, 2007). These are essential aspects of effective teacher practices.

Purposeful Instruction

Purposeful literacy is the cornerstone of a successful reading program. Studies cited in the National Reading Panel report provided substantial evidence that explicit comprehension instruction improves students' understanding of the text and gives them a purpose for reading (Harvey & Goudvis, 2007; National Reading Panel, 2000). To read with a purpose, teachers must target skills or reading goals that match state standards and provide students with strategies and activities that match those purposes for reading. Miller (2013) noted that teachers should use CCSS, along with district and school expectations, and personal goals for students to determine content and strategies to be

taught. In order for that to occur, teachers must purposefully plan instruction using their own metacognitive knowledge and regulation to model proficient reading strategies for students. These purposeful activities provide students with opportunities to employ strategies during independent reading.

Readers who struggle read below grade level expectations. These students are challenged by the literacy demands of their present grade level (Melekoglu & Wilkerson, 2013). Such students are more likely to learn essential reading skills and strategies when teachers use explicit models of comprehension instruction as part of their repertoire of methods; they impart new information to students through meaningful interactions with deliberate models and demonstrations. A number of major studies have demonstrated the importance of thoughtfully planned instruction for increased student learning. Purposeful planning has been shown to be valuable in teaching phonemic awareness, phonics, fluency, vocabulary, and comprehension (Ruppley, Blair, & Nichols, 2009). Further research has provided insight into the importance of proper planning and its prevention of poor performance. When teachers plan with an end in mind, setting goals and outcomes before planning, they can create guiding questions that foster inquiry, understanding, and a transfer of learning (Miller, 2013). Planning high quality assessment prior to creating an instructional plan provides the teacher with a roadmap for sound, intentional, and thoughtful teaching. Teachers should be reflective, determining the essential skills students need to be successful readers, goals to be set, and instructional strategies that best achieve the outcomes.

Once a quality unit plan is in place, deliberate teaching brings together many components of effective instruction: building on prior knowledge; teacher modeling;

engaging students in guided practice; and student independent practice, hands-on activities or group projects. This provides opportunities to scaffold student learning for success, which enables students with gradually diminished amounts of coaching assistance from the teacher to practice a new skill (Block & Pressley, 2002). An example of effective teaching in literacy begins with their assessment of students' knowledge about a comprehension strategy; the strategy they intend to teach their students is introduced by explaining the strategy and its importance for strategic readers to be able to use. They instruct their students to listen and to watch closely as they model this strategy during a "think-aloud." Research has suggested that modeling the think-aloud strategy gives students the chance to hear a skilled readers use of strategies to comprehend text (Duffy et al., 1986; Keene & Zimmermann, 2013; Pressley, 2006). After teachers guide the use of the strategy during large-group focused discussion, students share their thinking with one another during collaborative practice. Collaborative practice, or small group conversations during paired reading of text, allows teachers to move among groups to assess and respond to students' needs. Students practice the skill independently, with peers, and then apply the strategy to a variety of authentic reading situations (Harvey & Goudvis, 2007; Marzano, 2007; Moore, 2005). This gradual release of responsibility gives the learner control of knowing how, when, and why to apply a particular strategy before, during, or after reading (Miller, 2013). This metacognitive regulation allows students autonomy when using comprehension strategies during independent reading.

Automaticity

Metacognitive knowledge, metacognitive regulation, and regular proficient practice create automaticity in strategy application. According to Bloom (1986), three

distinct processes exist that learners need to master before a skill, idea, or behavior becomes automated. He stated, “If it (a skill) has been developed to an automatic level, the process can be used with great economy of effort,” (p. 74). The process, skill, or behavior involves much less cognitive effort from the individual completing the task. If a task is to become automatic, it also needs to be completed rapidly. Automatic control involves a rate of completion far superior to the time needed to complete a task under conscious control. Automaticity requires a third component, accuracy. Once automaticity reaches a high level of accuracy and precision, an individual can maintain automaticity of a process at high levels over a long period with a minimal amount of practice from time to time. Processes such as reading, walking, or playing an instrument require high levels of automaticity to complete the task while involved in something else. When students reach the point of reading with automaticity, they are able to process that which is read and apply comprehension strategies to a variety of types of reading for different purposes.

Automaticity plays a key role in metacognitive regulation. Metacognitive knowledge can be attained without automaticity; however, in order to function well, metacognitive processes must be practiced for economy of effort, speed and accuracy. Gollwitzer and Schaal (1998) focused their research on the action of metacognition and suggested planning and goal setting as processes that lead to proficient strategy implementation. They proposed that one who encounters a well thought out, pre-planned activity would commence the activity immediately, efficiently, and soon, without conscious thought.

Barriers to Effective Metacognitive Comprehension Strategy Instruction

A barrier to effective metacognitive comprehension strategy instruction involves the limited research that exists on the amount of deliberate and consistent metacognitive comprehension instruction in reading classrooms (Pressley, 2006; Schofield, 2012).

Durkin's landmark study (1978-1979) observed fourth-grade students (social studies and reading) for 4,469 minutes and recorded that teachers' spent 20 minutes or less than 1% of instructional time on comprehension strategy instruction.

A second barrier to effective literacy instruction is the continued practice of comprehension assessment without focused strategy instruction. Studies by Duffy et al. (1980) described that teachers used the bulk of instructional time monitoring students, providing assignments, and giving corrective feedback (as cited in Durkin, 1978-1979; Ness, 2011). Despite 30 years of research on metacognition and comprehension, teachers continue to lack awareness. Classroom observations indicate that research has not yet been widely implemented in classroom practice (Block & Pressley, 2002; Dole, 2000). A study conducted by Pressley et al. (1998) nearly 20 years later revealed similar results, noting that explicit teaching of comprehension strategies rarely occurred. Literacy teachers should be made aware of their own metacognitive knowledge and regulation, as it pertains to reading instruction.

A third barrier to effective strategy instruction is the lack of explicit teaching of metacognitive strategies. Research focused on comprehension monitoring has shown that "neither children nor adults are very successful at identifying embedded problems in text" (Block & Pressley, 2002, p. 79). These problems are not a failure to evaluate but, rather, the lack of implementation of fix-up strategies to comprehend difficult text. Discussing a

strategy has replaced instruction in elementary grades. Teachers spend minimal classroom time engaged in planned instruction of comprehension strategies and the balance of instructional time assessing students' comprehension with worksheets and questionnaires. Those interviewed claimed to be implementing strategy instruction; however, when observed, they mentioned or used strategies without direct, strategic instruction (Boulware-Gooden et al., 2007; Durkin, 1981; Schmoker, 2011). Teachers often are unaware of the way in which to model their own metacognitive knowledge for students.

Metacognitive comprehension strategy instruction often is absent from reading classrooms. Pressley listed several reasons that metacognitive comprehension instruction is uncommon in elementary classrooms: (a) Teachers may struggle with their own understanding of critical components of reading comprehension instruction; (b) To effectively implement quality strategy instruction, a teacher's role would shift from instructor to facilitator; and (c) Effective instruction is complicated by requirements such as explicit teaching, locating appropriate texts, and teaching content along with strategy instruction (Pressley, 2006). Research has cited three specific barriers to deliberate teaching of comprehension strategies: (1) Most teachers' skill proficiency is absent and therefore cannot provide direct and explicit comprehension instruction; (2) Some content-area teachers believe it is not their responsibility to teach comprehension strategies to students; and (3) Teachers may misunderstand or misinterpret comprehension strategy research (Kamil et al., 2008). "Most readers who are not explicitly taught cognitive procedures are unlikely to learn, develop, or use them spontaneously" (Trabasso & Bouchard, 2002, p. 177). In conclusion, reading teachers possess metacognitive

knowledge, although the lack of metacognitive regulation prevents them from providing deliberate strategy instruction.

Summary

Research is plentiful on metacognition as a study, and comprehension strategy instruction with teachers and students as the subject of intervention; yet, few studies target application of metacognitive comprehension strategies in authentic classroom settings. Research evidence is fruitless if those findings are not applied in reading classrooms across the country. Research is needed concerning the effects of these two closely knit strategies on the teaching and learning in elementary classrooms across the nation. Teacher knowledge of the impact of metacognitive literacy strategy instruction on students' reading comprehension can lead to improved teacher practice. The challenge lies in creating awareness and instructional practices that allow teachers to focus their time and attention daily on behaviors that provide effective, efficient, and deliberate instruction of metacognitive and comprehension strategies together in authentic learning situations to students.

While much is known in the areas of metacognition and comprehension, few studies exist as to the reason teachers spend little or no classroom time deliberately teaching strategy instruction. One empirical study conducted by Pressley et al. (1998) described a qualitative research study on 10 fourth- and fifth-grade classrooms to examine strategy instruction in reading, writing, and instructional goals. During teacher interviews, researchers noted infrequent instances of comprehension strategy instruction, while teachers believed they were providing these opportunities for students. Many cited the use of summarizing, predicting, and visualizing but utilized them as an assessment

tool, rather than an instructional strategy. Empirical studies targeting research on metacognition in literacy instruction, as well as explicit comprehension instruction, are needed to determine whether teachers are aware of their own metacognitive strategies. Studies also are needed to determine that, if teachers are aware of their own metacognitive strategies when reading, those strategies are not being taught effectively and deliberately in the classroom through comprehension strategy instruction.

CHAPTER III: METHODOLOGY

Overview

Reading comprehension is a complex task that relies on various automatic and strategic cognitive processes (Cain, Oakhill, & Bryant, 2004). Skilled reading requires students to monitor their comprehension by regulating the use of reading strategies to make sense of the text. Comprehension monitoring is one aspect of metacognition and, therefore, essential for proficient reading (Wagoner, 1983). Many teachers spend a portion of their literacy instruction on teaching reading comprehension strategies. Yet, students often fail to apply comprehension strategies to authentic applications (Kelly & Clausen-Grace, 2013).

The purpose of this qualitative study was to gain a deeper understanding of a teacher's awareness of metacognition, her authentic comprehension instruction, and if/how her awareness translates to purposeful classroom instruction. While an abundance of research exists supporting the systematic teaching of metacognitive strategies to increase reading achievement, there are missed opportunities in teaching situations that prevent this from occurring in daily instruction. Additionally, this study attempted to identify those missed opportunities that prevent teachers from accomplishing the goal of providing students with authentic learning situations to apply research-based reading instructional strategies. This section details the methodology of the study.

Research Questions

1. How is a teacher's metacognitive awareness evident during classroom reading instruction?

2. What (if any) deliberate metacognitive strategy instruction opportunities are missed when literacy instruction is transpiring in the classroom?

Research Design

According to Merriam (1998), qualitative research helps the researcher to understand and to explain social phenomenon in natural environments. Merriam outlined the characteristics of qualitative research. First, qualitative researchers focus on understanding the manner used by individuals to make sense of their surroundings and experiences. Second, the researcher is the primary source of data collection and analysis. Third, qualitative research involves the researcher going into the field, the site, or the event being studied to collect evidence. Fourth, the researcher uses an inductive strategy, which includes building concepts and theories from observations rather than examining existing theories. Finally, the product of qualitative research is richly descriptive, comprehensive, and holistic. “When studying a context, qualitative researchers examine people’s actions and the structures that encourage, shape, and constrain such actions” (Tracy, 2013, p. 22). Qualitative research is flexible and responsive to changing conditions. The researcher spends ample time as an observer in the natural setting of the study.

This qualitative research study focused on using the case study method. Yin (2009) defined case study research as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 18). Case studies are unique in that they are exhaustive descriptions and analysis of single units or delimited systems, with a targeted focus of defining the case. The case study approach is a

systematic process of gathering and analyzing data in a comprehensive and holistic way. The case study method was selected specifically because the focus of the research is on intent on insight, understanding, and interpretation rather than hypothesis testing. By concentrating on a single phenomenon or entity (the case), the aim was to uncover the interaction of significant factors characteristic of the phenomenon (Merriam, 1998).

The bounded system, or case, of this study was an individual elementary school literacy teacher and her classroom practices as the primary unit of analysis. The product is in the form of a case study. "A qualitative case study is an intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (Merriam, 1988, p. 21). The intent of this study was to investigate this particular teacher's metacognitive awareness and the frequency in which this awareness translated into direct teaching of comprehension strategies in the reading classroom of this "highly-qualified" teacher. As defined by the Kentucky Department of Education website, highly qualified teachers must possess: (a) a bachelor's degree; (b) full state certification or licensure; and (c) must prove that they have knowledge of each subject they teach.

The context of the study was the teacher's classroom. Data collection and analysis focused on the evidence of teacher metacognitive awareness during classroom reading instruction and missed opportunities for teaching metacognitive comprehension strategies during observed periods. The researcher's intent was to be a non-participant observing and collecting evidence to provide particularistic, descriptive, and heuristic aspects of this case study. The length of immersion in field research was determined by the length of the teacher participant's unit of study. The length of research collection consisted of a 12-day unit of study in the teacher's literacy classroom.

Setting

The Kentucky Department of Education website, specifically state and school report card data, was explored to identify schools in south central Kentucky with proficient scores on the Kentucky Performance Rating for Educational Progress (K-PREP) test. According to the website (2015), K-PREP tests are blended norm-referenced and criterion-referenced measures that provide national percentiles and student performance levels of novice, apprentice, proficient, and distinguished. These assessments are administered in grades three through eight in reading, mathematics, science, social studies, and writing. The school district targeted included one elementary school and has earned a proficient score in reading achievement. Distinguished schools are those that score in the 90th percentile of Kentucky schools. The state assigns a proficient rating to any school scoring between the 89th and 71st percentile.

The site of the study, Rural Elementary, serves grades one through four, with student enrollment demographics comparable to the state mean. Rural Elementary is a public elementary school with an enrollment of 521 students with 67% free and reduced lunch. According to the Kentucky Department of Education, the school is ranked proficient on the reading portion of the K-PREP achievement and accountability test. This study focused on using the results of the 2014-2015 reading portion of the K-PREP test to select teacher participants. The teacher, principal, and the district administrator provided consent for the research prior to implementation of the study. Students in the classroom were not study subjects.

Participants

To identify one high quality elementary reading teacher in a district with proficient reading achievement on the K-PREP assessment, I contacted the district superintendent and elementary principal via e-mail to obtain permission and to determine potential teacher candidates. The superintendent forwarded my request to the building principal, and permission was granted verbally and in writing for the study to proceed. I then solicited teacher recommendations from the principal by requesting a list of highly qualified third through fifth-grade reading teachers. The principal forwarded a list of third- and fourth-grade teachers for selection, as the building contains kindergarten through fourth grades only. After initial contact with administrators, I communicated with recommended teachers via email to schedule a screening interview to examine their metacognitive awareness and their perceptions of their implementation of comprehension strategy instruction during their literacy block. All recommended teachers were contacted and agreed to meet for an initial screening interview to investigate their metacognitive awareness and their beliefs about literacy instruction.

Instruments

Interviews were conducted at the onset of this project to determine possible teacher candidates and to narrow the pool to one selected teacher participant. As part of the initial screening process, teacher demographics were collected using a survey taken from the Kentucky Reading Project Teacher Survey (2012). Permission was obtained from the WKU Director of Educational Leadership to use this survey for initial screening of candidates. Permission also was granted to use the Kentucky Reading Project (KRP) Research Field Observation Template to collect data during classroom observations. The

Metacognitive Awareness Inventory for Teachers (MAIT) and open-ended discussion questions, adapted with permission, were used to determine the teacher candidate to select for the research case study. Balcikanli in 2011 designed the MAIT based on the Metacognitive Awareness Inventory (MAI). To this point, metacognition was widely studied but no survey existed solely to test adult metacognition. I contacted Dr. Balcikanli and obtained written permission to use the MAIT as an initial screening tool for this research study. These questions were used as a guide to create a clearer picture of each candidate's metacognitive awareness and to direct the conversation during initial interview.

Procedures

Prior to any informal or formal interview, I met with third- and fourth-grade teachers and the curriculum coordinator. I thanked them for their willingness to participate. During the initial introductions, one third-grade teacher withdrew from the study, stating she would be willing to participate if needed, but she had taught third grade reading for only five months and did not feel comfortable participating. After a brief discussion, the teacher left the interview. One fourth-grade teacher declined to attend the initial screening process, and the curriculum coordinator volunteered her assistance in the videotaping process but requested that she not be selected as a participant, as she was not in the classroom and did not consistently teach reading.

Two teachers from this rural school district remained as possible case study candidates. Subsequent to providing teachers with an overview of the process and teacher consent was obtained, volunteers received from WKU two copies of informed consent forms for participation, including the official IRB letter of approval, appropriate contact

information, and a guarantee of anonymity, as this published information and future publications contain only pseudonyms. I reviewed the consent form with each candidate; they signed two copies, one for their records and one for mine. Teacher candidates then completed a brief survey designed to gather demographic information about the teacher, years of experience, perceived areas of expertise, and level of educational attainment.

Each teacher completed a series of questions during the initial screening using a Likert scale, 1 - Strongly Disagree and 5 - Strongly Agree, on the Metacognitive Awareness Inventory for Teachers. The third-grade teacher, nearing retirement, rated her metacognitive knowledge and regulation in all areas from declarative knowledge to evaluation at a 5. After asking probing questions, she stated that she felt confident in her teaching abilities after many years of experience with the items listed and disclosed that she had learned many of these strategies along the way. The fourth-grade teacher, as newly tenured, rated her metacognitive knowledge an average of 4.33 and her metacognitive regulation an average of 4.16 of 5. After asking follow-up questions, this teacher disclosed that she felt she lacked experience and did not feel confident in selecting a score of 5 for each choice because she was still “new” at teaching.

After completion of the MAIT and brief discussions, I conducted an interview using unstructured, informal, open-ended questions designed to provide a profile of each teacher’s metacognitive awareness, pedagogical knowledge, and teaching philosophy to narrow the pool of potential participants. According to Patton (2002), interviews are useful in gleaning information that is not directly observable. Informal interviews enabled me to learn more about the perspective of the potential candidates and to gain insight into their feelings and motivations. Teachers were asked to elaborate on their responses to

provide in-depth perspective as related to the research questions. To narrow the pool to one candidate who possessed suitable interpersonal language skills and who was self-reflective, I used an interview guide that “provides topics or subject areas within which the interviewer is free to explore, probe and ask questions that will elucidate and illuminate that particular subject” (Patton, 2002, p. 343). This particular interview guide targeted metacognitive awareness and focused on various instructional strategies implemented in each teacher’s reading classroom, particularly comprehension instruction. The interviews allowed the teachers to be candid and to share their beliefs and knowledge, while contributing to the narrative/descriptive nature of the data. Yin (2009) cautioned about bias that exists with poorly articulated questions, response bias, and inaccuracies of poor recall. I guarded against bias by asking clarifying and follow-up questions during the interview process.

Both teachers were highly qualified according to criteria set forth by the Kentucky Department of Education. Each held a bachelor’s degree in elementary education, a master’s degree from an accredited university, full state certification for teaching in an elementary classroom, and had proved that they know each subject they teach through observations and assessments. The third-grade teacher was very calm and reserved. She said she would agree with being observed in her classroom but needed a few weeks to get things together. She possessed 24 years of teaching experience with a variety of third- and fourth-grade experience. She currently teaches third-grade language arts with a team teacher providing instruction in math and science. When asked about her typical unit development and instruction, she explained that she created five-day units of instruction using basal reading materials. She introduced the intended content on Monday of each

week and assessed students over targeted content each Friday. She recalled some formal training in metacognitive and/or comprehension strategy instruction but could not recall the exact type or form of instruction she had received. When asked about personal metacognition and comprehension strategy use, she could not name specific strategies used while reading but believed that explicit instruction was needed for individual student success.

While conducting the initial interview with the fourth-grade reading teacher, she was very open and inviting. She stated that she was willing to do anything to help during this process and welcomed me to her classroom. When asked about her unit design, she disclosed that her units were based on pre-selected chapter books and Common Core standards. She possessed nine years of teaching experience, all in third- and fourth-grade language arts classrooms, and stated planned a unit around a chapter book and the length was determined by student understanding of the content. She revealed that her schedule was flexible and she switched her reading and writing blocks based on student needs. She had little knowledge of any previous study on metacognition but discussed strategies she used while teaching that included many comprehension strategies such as questioning techniques, previewing, and planning.

When I spoke with each teacher, the third-grade teacher discussed her use of basal reading and structured classroom literacy in unit planning and classroom instruction. While she had many years of experience, she revealed that she used the same structure to teach each lesson and unit. The fourth-grade teacher discussed the use of a variety of materials when planning and implementing instruction. The initial interviews revealed the two teachers had contrasting perspectives in terms of planning and classroom

structure, but they concurred that literacy is vital for student growth and for explicit instruction of comprehension strategies.

The fourth-grade teacher was selected as the subject of this case study. She was selected because she represented the majority demographic of teachers in elementary education, being under the age of 40 and holding a master's degree (National Center for Educational Statistics, n.d.). Upon identifying the case study subject, observations were conducted in February and March. Due to the qualitative nature of this study, I carried out data collection as the primary researcher. Merriam (1998) stated that data collection techniques are dependent upon theoretical orientation of the researcher, the purpose of the study and the case or sample selected. In this study, interviews, observations, and teacher reflections were used as the main modes for data collection.

Once the case study participant was determined, we discussed her plans for a 12-day literacy unit and created a timeline to conduct direct observations, as a non-participant in the classroom setting, at the initial and final days of the designated observation window. To limit the disruption to classroom instruction, and because I also am a teacher, the participant was asked to videotape lessons 2 through 11. The curriculum coordinator, who was targeted but declined participation, volunteered to help the teacher with videotaping the lessons. At the end of each instructional day, I reviewed, transcribed, and analyzed each videotaped lesson. The total number of observations, direct and videotaped, was 12. Observations occurred during the teacher's morning literacy block, 60 minutes per visit/videotape.

During on-site visits and while reviewing videotaped lessons, I collected field notes using the KRP Research Field Observation Template, measured in five-minute

increments with detailed notes concerning metacognitive knowledge and regulation, as well as comprehension strategy instruction. Field notes were descriptive in nature, with the focus on accurately recording events, details, and interactions. Patton (2002) emphasized the importance of descriptive note taking in the field, with the purpose of providing thick, deep, and rich description during data collection. Geertz (1973) devised the term “thick description” as a reference to the practice of delving deeper than surface understanding to comprehend the contextual meanings behind observed behaviors. I transcribed each video taken during the 12-day observations and asked post-observation questions in person or via email after the lesson. I asked clarifying questions focused on the stated research questions when needed for data collection and analysis purposes in order to create in-depth, thick descriptions and to limit observer bias and influences.

During the observation cycle, I requested that the teacher maintain a reflective journal to record thoughts, ideas, and reflections on each day’s reading lesson. I provided the teacher participant with a journal and sample reflective questions with a request to reflect on the lesson as soon as possible after teaching. McDonough (1994) examined the diaries of four veteran teachers and proposed that such diaries “help us document and formalize the everyday working experience that otherwise might be lost” (p. 64). This reflective journal served to document the teacher’s thoughts, feelings, and ideas as they pertain to each lesson. The teacher was asked to record (a) a short synopsis of the lesson; (b) that which went well during the lesson and the reason (c) changes that would be made for future lessons and the reason; and (d) impact on the next day’s lesson as a result of reflection on that day’s lesson outcomes. This reflective journal provided the teacher with a voice in the data collection process.

Also requested were copies of literacy information shared with parents, such as newsletters and information about instructional activities used during the two-week observation, to obtain a broader picture of the scope of teacher metacognitive awareness during planning and implementation of the unit. These data provided concrete evidence of the modes of metacognitive and cognitive strategy delivery that occurred in the classroom.

Based on the research questions asked, I created a spreadsheet, as illustrated in Table 1, of the three types of both metacognitive knowledge and regulation, and comprehension instructional strategies used before, during, and after active reading, along with critical attributes of each. I paired metacognitive regulation of planning with pre-reading comprehension strategy instruction, as they are interconnected and difficult to separate when coding data. Metacognitive monitoring coupled with comprehension strategies utilized during reading, as well as metacognitive evaluation were linked with comprehension strategies used after reading a text. These strategies were labeled 2 for metacognition and 3 for comprehension strategies, with each subcategory labeled as a.1 a.2, etc.

Wiersma and Jurs (2009) explained the importance of coding during qualitative analysis. Process codes are useful, as the presence and sequence of metacognitive comprehension strategy use can lend to connecting and to plotting patterns unique to this study. The spreadsheet was used as a guide during observation and to direct data analysis. Tracy (2013) noted that, for data to have meaning, the researcher needs a guide or plan to plot evidence that is collected to determine emerging patterns. When questions surfaced during review of videotaped lessons, a discussion with the teacher participant

was initiated to clarify her thinking. This discussion targeted the teacher's rationale for use of specific comprehension strategies or to clarify her thinking. I also searched for missed opportunities during videotaped lessons and probed the teacher for reflection during those moments throughout the unit.

To achieve triangulation, qualitative data was collected in the form of initial interviews, observation field notes, post-observation interviews, and journal reflections. Patton (2002) recommended multiple sources of data be sought and included, as no single data source alone can provide a comprehensive perspective. Therefore, I transcribed interviews and observations and conducted initial interviews prior to the first observation. I also conducted post-observation interviews immediately following observations to obtain authentic reflections from the teacher and to clarify observations during the study. Informal interview data were gathered for post-observations from emails between the teacher and the researcher. I also solicited the assistance of the reading specialist at the school and provided her with a list of codes (see Table 1), including explanations, and two sample selections from observation number 8. The reading specialist coded the selection and a comparison was made to the primary researcher's coded data.

Data Management and Analysis

After the initial screening process was completed and an observation schedule was established, I conducted data analysis after each interview and transcribed all field observation notes from direct observations and videotaped lessons. Transcriptions were expanded between observations based on follow-up questions, and teacher introspections were recorded in a reflective journal.

Table 1

*Coding System of Metacognitive Knowledge, Regulation, and Comprehension Strategy**Use Before, During, and After Instruction*

1. Metacognitive Knowledge	2. Metacognitive Regulation	3. Comprehension Strategies
1a. Declarative	2a. Planning	3a. Before reading
1a.1 Aware of own strengths and weaknesses of teaching.	2a.1 Pace myself when teaching to have enough time	3a.1 Stimulating prior knowledge
1a.2 Know skills that are most important to be a good teacher	2a.2 Set specific teaching goals before I start teaching	3a.2 Setting a purpose for reading
1a.3 Control over how well I teach	2a.3 Ask myself questions about the teaching materials I am going to use	3a.3 Making connections
1a.4 Know what I am expected to teach	2a.4 Organize my time to best accomplish my teaching goals	3a.4 Organize schema (examples: KWL chart, anticipation guide, list-group-label, picture walk)
1b. Procedural	2b. Monitoring	3b. During reading
1b.1 Try to use teaching techniques that work in the past	2b.1 Ask myself periodically if I meet my teaching goals while I am teaching	3b.1 Make connections
1b.2 Specific reason for choosing each teaching technique I use in class	2b.2 Find myself assessing how useful my teaching techniques are while I am teaching	3b.2 Make inferences
1b.3 Aware of what teaching techniques I use while teaching	2b.3 Check regularly to what extent my students comprehend the topic while I am teaching	3b.3 Visualize
1b.4 Use helpful teaching techniques automatically	2b.4 Ask myself questions about how well I am doing while I am teaching	3b.4 Summarize
		3b.5 Repair broken-comprehension
1c. Conditional	2c. Evaluating	3c. After reading
1c.1 Use my strengths to compensate for my weaknesses in teaching	2c.1 Ask myself how well I have accomplished my teaching goals once I am finished	3c.1 Summarize
1c.2 Can motivate myself to teach when I really need to teach	2c.2 Ask myself if I could have used different techniques after each teaching experience	3c.2 Evaluate
1c.3 Use different teaching techniques depending on the situation	2c.3 Ask myself if I'd teach it more effectively next time	3c.3 Analyze
1c.4 Know when each teaching technique I use will be most effective	2c.4 Ask myself if I have considered all possible techniques after teaching a point	3c.4 Reflect

(Adapted from the *Metacognitive Awareness Inventory for Teachers* by C. Balcikanli, 2011, *Electronic Journal of Research in Educational Psychology*, 25, 1309-1330. Retrieved from http://www.investigacion-psicopedagogica.com/revista/articulos/25/English/Art_25_563.pdf)

Before observations began, I created a coding system (Table 1) focused on research questions to guide analysis of classroom observations. “Coding is a process of organizing data and obtaining data reduction. In essence, it is the process by which qualitative researchers see what they have in the data” (Wiersma & Jurs, 2009, p. 242).

During transcription and analysis, I searched for broad themes and patterns that emerged during the data analysis process as they related to metacognitive knowledge, evaluation, and identified comprehension strategies. As mentioned earlier, Merriam (1998) asserted that data collection and analysis occur simultaneously. Therefore, as data were collected, I reviewed videotapes of classroom observations, interview summaries and preliminary questionnaires to observe the frequency of teacher behavior as it related to research questions. Observed teacher talk and instructional strategies were grouped and labeled according to their relation to the research questions; and as the project continued, I searched for more specific groupings according to the data. Information was then grouped into two categories that related to the research questions: metacognitive/comprehension strategy use and missed opportunities during instruction. The coding system focused overall on the research questions. Interviews, artifacts, and observations were analyzed and linked together with the goal of identifying patterns and themes to provide insight into missed metacognitive opportunities in an authentic classroom setting.

Summary

This chapter provided an in-depth description of the research method employed in this study (qualitative case study), procedures, and methods of analysis. Data were collected through initial screenings, observations, teacher reflective journal, and follow-

up discussions. The transcribed data were analyzed using a coding system created to reflect on the research questions. The results from the analysis are discussed in Chapter IV.

CHAPTER IV: RESULTS

This chapter recreates the study in a way that illustrates a clear picture of the events observed in the case study classroom. It establishes a basis for the presentation of the analysis of the reflection and teaching styles of one “highly qualified” third-grade reading teacher in a rural elementary school. Copious amounts of information were amassed from initial interviews, observations, reflections, and analyses and are included in this chapter to provide an in-depth introduction to the case study participant and to provide insight into her classroom instructional practices.

This study centered around two main questions:

1. How is a teacher’s metacognitive awareness evident during classroom reading instruction?
2. What (if any) deliberate metacognitive strategy instruction opportunities are missed when literacy instruction is transpiring in the classroom?

Initial Interview with Teacher Participant

After determining the case study participant, I met with “Kate” (pseudonym), the fourth-grade language arts teacher, to conduct a more in-depth interview and to begin to build a context for data collection. Kate welcomed me into her classroom and indicated she was looking forward to participating in a research study. To begin the interview, I reviewed her demographic information to ensure my notes were accurate. At the time of the study, Kate was 30 years old with nine years of teaching experience, exclusively in third- and fourth-grade language arts classrooms. She obtained a master’s degree in integrating technology in the classroom, has a Rank I degree, 30 hours post master’s in supervising instruction. During the initial interview, Kate is friendly and shared her

opinion that reading was the foundation of literacy success. I continued the interview by reviewing questions listed in the initial teacher interview, as follows:

Describe your teaching philosophy. Specifically, what is your philosophy on literacy instruction?

“I feel that literacy instruction is probably the most important content taught in the elementary school and beyond. In life, you have to be able to read in all situations. It is very important that I provide my students with opportunities to be successful in reading and to prepare them for life.”

Describe a typical day of literacy instruction in your classroom.

“It would start with a review of whatever skills we are covering. I try to have students not simply answer questions, but also provide examples of why they know what they know. We would then read over or selected passage and pull apart what the passage was talking about. Finally, we do some comprehension or activity to ensure students have successfully participated in the lesson. I try to break down the assignment for my special needs students, but expect them to participate as well.”

Probing question: Do you normally teach comprehension strategies during the unit or do you use comprehension mainly for assessment?

“I don’t necessarily explicitly teach comprehension strategies with each chapter book, I just work them in as we need them, or where they fit with the book we are studying. I use a lot of assessments to make sure that the students understand what we read together.”

Did you study any metacognitive strategies during undergraduate or graduate level work? If so, what do you know about your own metacognition? In relation to literacy? In relation to comprehension instruction?

“I don’t really have a lot of formal experience with metacognitive strategies but we have had several reading trainings and I remember talking about comprehension strategy instruction in my undergraduate work. We use comprehension strategies all of the time in class, but I incorporate those into the curriculum as needed.”

How do you choose reading materials, topics or themes to cover in your unit? How do you tie these materials to comprehension strategy instruction?

“I choose materials based on what I think would catch my students’ attention. I try to introduce them to stories that they have not heard about before. For example, instead of reading *Charlie and the Chocolate Factory* by Roald Dahl, I would choose to use *James and the Giant Peach* or *The Witches* by the same author. I also try to choose materials that fit well with my standards. That is where I incorporate comprehension strategy instruction.”

How do you assess your students’ comprehension?

“Each and every day I question, question, question! I think that questioning students and having them explain why they know helps them to make connections between what they know and what we are learning. I encourage them to test on the books that we read by using Book Adventure.”

How do you encourage students’ independent use of reading strategies during self-regulated (free) reading time?

“I make sure that students have a variety of books to read and that they can test on each book after they complete the reading. I work with students during silent reading to me and also allow students to do book reports and projects.”

Kate also completed the *Metacognitive Awareness Inventory for Teachers* (MAIT) during the initial interview. Her Initial questions and responses are listed in Figure 1 below.

Metacognitive Awareness Inventory for Teachers (MAIT)	
<i>Scale: 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree</i>	
Declarative Knowledge	
1.	I am aware of the strengths and weaknesses in my teaching. (5)
7.	I know what skills are most important in order to be a good teacher. (4)
13.	I have control over how well I teach. (4)
19.	I know what I am expected to teach. (5)
Procedural Knowledge	
2.	I try to use teaching techniques that worked in the past. (5)
8.	I have a specific reason for choosing each teaching technique I use in class. (5)
14.	I am aware of what teaching techniques I use while I am teaching. (4)
20.	I use helpful teaching techniques automatically. (3)
Conditional Knowledge	
3.	I use my strengths to compensate for my weaknesses in my teaching. (4)
9.	I can motivate myself to teach when I really need to teach. (4)
15.	I use different teaching techniques depending on the situation. (5)
21.	I know when each teaching technique I use will be most effective. (4)
Planning	
4.	I pace myself while I am teaching in order to have enough time. (3)
10.	I set my specific teaching goals before I start teaching. (4)
16.	I ask myself questions about the teaching materials I am going to use. (4)
22.	I organize my time to best accomplish my teaching goals. (4)
Monitoring	
5.	I ask myself periodically if I meet my teaching goals while I am teaching. (4)
11.	I find myself assessing how useful my teaching techniques are while I am teaching. (5)
17.	I check regularly to what extent my students comprehend the topic while I am teaching. (4)
23.	I ask myself questions about how well I am doing while I am teaching. (4)
Evaluating	
6.	I ask myself how well I have accomplished my teaching goals once I am finished. (5)
12.	I ask myself if I could have used different techniques after each teaching experience. (4)
18.	After teaching a point, I ask myself if I'd teach it more effectively next time. (4)
24.	I ask myself if I have considered all possible techniques after teaching a point. (4)

Figure 1. Kate’s scores on the Metacognitive Awareness Inventory for Teachers. The MAIT is a list of 24 statements. The purpose is to gain insight into teacher metacognitive awareness. In this figure, questions are categorized and labeled (Balcikanli, 2011).

Kate's initial responses were based on her years of experience, accumulated knowledge gleaned from other teachers and from professional development opportunities, life experience, and her personal beliefs and values. We began our discussion with a focus on Kate's rating of her own metacognitive knowledge, or her awareness of her own thinking. We discussed each of the three parts of metacognitive knowledge: declarative, procedural, and conditional.

When asked about her declarative knowledge, Kate rated herself on the MAIT between a 4 and 5 on all questions. She is aware of her strengths and weaknesses as a teacher and is confident in her ability to know that which she is expected to teach. Kate rated herself as a 4 on her quality of teaching and knowledge of skills of an effective teacher. When questioned about these two responses, she replied: "I would like to think that I know everything there is to know about being a good teacher, but I also find that to be a fluid topic. I think that there are times that different things are needed to be a good teacher. In our ever-changing technological world, I think that leaves room for new qualities to come out."

She also shared, "I would like to think that I have complete control over how well I teach. Sometimes, however, there are times when how well you teach has a direct connection to how well the students are receiving/participating in the teaching."

We then next discussed her awareness of her own procedural knowledge. She indicated in the survey that she is confident in her ability to select and to apply successful teaching strategies in her literacy classroom. However, she lacks confidence in her ability to recognize or to identify the techniques she employed automatically. When asked probing questions, Kate explained, "I am realistic. Sometimes I cannot conjure in my

mind that this is the technique I am using right now. Sometimes, the only thing I can think is to fly by the seat of my pants!” When asked about automaticity of using best practice strategies, she replied, “I scored myself lower here (a three) because I need to be more intentional about looking up new techniques and implementing them. I do not want to fall into the mind frame of I will just do it like I always have. I know that sounds odd, considering I use the same materials, but I don’t always use the same activities.”

While reviewing Kate’s ranking of her awareness of her own conditional knowledge, she ranked herself between a 4 and 5 on all questions. She marked her strength as being able to use different strategies/techniques as dependent upon the teaching situation. Yet, she marked herself lower when reflecting on her knowledge of the time to employ those teaching strategies to be most effective. When questioned, she replied, “I would like to think that I know that a technique is the most effective, but I have also found that there are times when it appears my students are getting the material or information and doing well, but when the rubber meets the road, they bomb the quiz or assignment.” Kate also rated herself lower on her ability to motivate herself to teach and to use her strengths to compensate for her weakness. When asked to explain, she reflected, “Ninety-nine percent of the time I can motivate myself to teach what needs to be taught. However, when something goes against my personal belief system, I struggle. Such as evolution, etc.” She also shared, “I am super hard on myself. So, the reason I scored myself a 4 on compensating my strengths for weakness, is that I like to think that I do. But, I find that sometimes we all have room for improvement.”

According to Kate’s self-assessment on the MAIT, her awareness of metacognitive knowledge was high, scoring herself between a 4 and 5 on most questions

and a 3 on only one. Her responses indicated that she is aware of her metacognition when reflecting, but struggles with recognition when implementing these strategies during actual classroom instruction.

We moved forward to discuss her awareness of her ability to regulate her own metacognition, or to manage her own thinking process. Metacognitive regulation also consists of three categories: planning, monitoring, and evaluating. Kate's rankings in these categories were consistent with her choices in metacognitive awareness.

During our discussion of metacognitive regulation, Kate and I commenced with a conversation about her awareness of her own metacognitive planning abilities. According to her reflection on the MAIT, awareness of metacognitive planning, she ranked herself the lowest of all six metacognitive areas. She is secure in her awareness of setting teaching goals, asking questions about teaching materials, and organizing her time to meet set goals. In regard to setting goals, Kate explained, "I do set specific goals before I teach, but I like to allow myself some wiggle room in case a student poses a question, then we can explore that further." When asked to reflect on her materials selection process, she shared, "To some extent, I do question the materials that I am going to use with my students, but at the same time, I have used a lot of the materials over and over every year. I have found that the materials that I use can be modified to work with all groups of students. I don't use the exact same materials every year, but I have used enough with different groups that I can gauge what we need to use." When discussing time management, Kate laughed and said, "Ah, time management, another area of weakness sometimes for me. I like to be more fluid and allow time for extra instruction, etc. So, I hate to have to have a rigid schedule. It is very frustrating." When exploring

metacognitive planning, I saved the issue of pacing for the end of this discussion. Kate had keen insight on the reason she scored herself a 3 in this metacognitive area: “Pacing is probably my greatest weakness, because I tend to want to make sure that almost all of my kiddos understand all of the materials before I move on. Also, if the students get super interested in a lesson or topic, I tend to spend more time on that topic just to keep their interest high while we go through the rest of the material I planned for that day.” Kate admitted that she struggles with time management and pacing for this exact reason. Her desire for all students to master all the material outweighs her desire to adhere to her pacing guide and lesson plans.

Our conversation led to the topic of metacognitive monitoring. Kate, again, appeared to score herself between a 4 and 5 in all areas but continued to question her ability to monitor her own thinking. She divulged that while she teaches, she is more focused on student understanding than on her own metacognitive awareness. She described her teaching style as “all in”; when she teaches, she focuses on her students and saves reflection for “after” teaching. Therefore, when asked about monitoring her ability to assess goal attainment, the regularity of her checking student comprehension when she is physically teaching, and her ability to evaluate her own success, she scored herself a 4. When asked about meeting goals, she replied, “When I think about this, I feel like I need to spend more time on my own self-assessment. Again, I feel that we all need room for improvement.” In terms of monitoring student comprehension during instruction, she revealed that she monitors comprehension of her students on a regular basis but she does not feel it is always intentional. “I do this more informally through a variety of data collection, comprehension questions, discussion, drawings, and other student artifacts.”

Kate admitted she struggles with answering these questions because she revealed her actions are not always intentional and often are a result of habit or new information she had learned from another teacher or professional development opportunities.

While examining questions related to evaluation, Kate disclosed that she feels much more comfortable with her abilities but sometimes fails to self-reflect as a result of time and the demands of teaching. When asked about using a variety of teaching techniques, Kate shared that she often uses the same materials or materials that she gained from other teachers to supplement her curriculum. She said, “I am realistic but sometimes I fail to self-reflect, especially when it comes to the materials I use.” Kate indicated that she realizes that she needs to spend more time self-reflecting, but the day always seems rushed. When asked about each evaluation question, she was adamant that she needs to make this a priority, but this was not her weakest rated area in the metacognitive survey.

As we continued our initial interview, I asked Kate to describe her teaching style, a typical day in her classroom, and any concerns she had about the study. Kate described her teaching style as flexible. She said she teaches reading and writing separately to two different groups of fourth graders and does not have a set schedule. She lets the students’ mood, attitude, and motivation, as well as topics to be covered, determine whether she teaches reading or writing first. She also admitted, due to her flexible schedule, time management, and student needs, she is behind on her pacing guide. Kate, along with other teachers in Kentucky, create their own pacing guides based on Common Core state standards, in order to have a timeline that ensures teaching of all standards in a particular

subject area. Therefore, Kate said she needs to make up for lost time before the state test is given in May.

When asked to describe a typical unit/day in her reading classroom, Kate became animated. She shared that she always likes to use chapter books with her reading students rather than basal readers. I asked her to explain her method for choosing specific chapter books for teaching and she insisted that she spends a great deal of time matching books to the current group of students she had. She also divulged that she has favorite books she shares with students year after year. During the interview process, Kate's class was reading the *Whipping Boy* because Kate indicated it lends itself to a study of literary devices. She described in detail using this particular book to teach each strategy and the students' interest when participating in reading and discussion. Kate described her planning as a fluid process. She begins with a book and a Common Core standard, and then she searches for information, materials, and assessments that are high quality. When asked about her definition of "high quality," she said that she looks for materials and assessments that asked students to be deep thinkers and searched for a variety of materials to keep students interested that are similar to those she is certain were effective in her classroom in previous lessons. Kate's units often are two to three weeks in length, depending upon the length of the selected book and student interest/discussion. She divulged that she does not set a definite end date for any unit because of interruptions, student interest, and unplanned school-wide activities that are out of her control. She shared that she does not submit prescribed lesson plans to her building principal or district administration, as each teacher is required to submit a pacing guide as proof of instructional sequence. She, therefore, informed me that her lesson plans are more an

informal guide for herself to provide a flexible plan for her teaching. I asked for copies of these as she prepared them, and she willingly agreed.

Next, Kate described a typical day in her literacy classroom. She said she begins each day by revisiting the previous day's lesson and initiating a conversation with students about prior instruction. She then moves to the current day's reading. She shared that she likes to "read aloud" to students to ensure their understanding of the text and because she believes students need to be provided with opportunities to experience competent models of reading fluency. Then, students are provided with some form of comprehension assessment to check for understanding or to determine whether any re-teaching is necessary. During this discussion, Kate said she tries to use a variety of activities during this part of the lesson to ensure students are engaged and prepared for the next day's lesson.

To conclude our interview, I asked Kate to share any questions or concerns about the study. She stated that she is concerned with the length of her unit and the flexibility of her teaching style. She indicated that if I agreed to be flexible with the length of the observation window, I was welcome to observe any time and she would be happy to videotape each lesson to decrease class disruption. She stated that she had just begun a study with her students on *The Whipping Boy* and wished I had arrived a few days earlier because she and former students really enjoyed the content. We discussed her ideas for the beginning date of her next unit and the approximate length of the unit. Kate and I set a date for initial observations; she committed to reflect on each lesson; and we finalized plans for her to share lesson plans, instructional materials, and assessments with me as soon as she had prepared them.

Unit Plans

Kate contacted me prior to our first scheduled observation to provide me with the unit outline and plans. She shared her concerns that her plans are not “conventional,” and I assured her they would work as a guide for this study. Kate selected the text *Stone Fox* as the primary text for this unit. When inquiring as to the reason this particular text was selected, she stated, “I have actually used *Stone Fox* before with students. I like to use it because it exposes the students to the fact that in real life, we don’t always have happy endings. I want them to realize and understand that.” For this unit, Kate selected Common Core standard RL 4.3 as her unit objective. This standard refers to describing, in depth, a character, setting, or event in the story, drawing on specific details from the text (Common Core State Standards Initiative website, 2010). Kate stated that she plans to focus on story elements and pointed out that she intends to narrow her students’ focus to character analysis. Kate planned her unit to last 12 days with the option to extend as needed.

To begin the unit, Kate planned to provide students with notebook paper and display a photograph projected onto her white board. Students would be given five minutes to write down thoughts. Students would then share ideas/conduct a discussion with their counterparts at the table. Next, students would be shown another photograph of dog sledding. They were then asked to repeat the process of recording thoughts and sharing with their neighbors. Kate planned to introduce the new chapter book they would read by showing the book and conducting a discussion with an accompanying slide presentation. Kate would provide students with an anticipation/prediction graphic organizer and would give them time to write predictions. She then planned for them to

conduct a journal writing activity with the following prompt: Think about all of the necessities and comforts that parents or guardians provide for you. Which responsibilities would you be able to assume if your caretaker became ill?

Unit plans for day two through ten consisted of Kate beginning each lesson by prompting students to review/discuss the previous day's lesson. She then planned to read one chapter of the book each day, aloud, to students. She also planned for each student to read along in his or her own copy of *Stone Fox*. Next, students would complete a summary or review activity specific to the chapter and discuss their thoughts with the teacher or one another. These activities include summary visualization, think-pair-share activities, predictions, character comparisons, and reflections. Finally, Kate planned daily for students to select five of 10 pre-determined questions for the selected chapter and to answer them. She planned to collect and to grade each student response sheet.

On the final instructional day of the unit, prior to the summative assessment, Kate planned to provide students with a study guide review to participate in a review game. Kate explained that she would divide students into two teams and use the study guide questions as review during the game. Students would then take a summative assessment the following day, to consist of multiple choice and open-ended short answer questions. Students also would be asked to complete an extended response journal-writing prompt as part of their final assessment for the unit.

Observations and Teacher Reflections

Day One

As I entered Kate's classroom on the morning of my initial observation, she greeted me with enthusiasm as students milled around the room preparing to begin their

school day. Kate explained that the bell was about to ring and we would get started soon after. She directed me toward a table in the back and told me to make myself comfortable. Kate's room was decorated with bright colors and contained multiple bookshelves around the room packed with chapter books for students. Anchor charts were displayed around the room for easy student reference. Her classroom was organized and her desk was situated at the front of the room next to her interactive board and computer. Kate remained busy as students entered the room, taking attendance and organizing materials to begin instruction. After the bell rang, Kate began instruction. She directed a student to pass out notebook paper while she displayed a photograph on the board. Kate told students she was about to introduce a new chapter book to them: "I want to see what information you have in that big brain of yours." She asked students to write down thoughts and observations about the photograph on the interactive board and asked their thoughts about the way this picture might tie to their next chapter book. The photograph consisted of two horses pulling a wagon; two men dressed in pants, button-down shirts and suspenders with hats on their heads; and five gallon buckets on the ground. The picture was in black and white and the men and horses were in a field. Kate explained later to me that this activity was designed to activate students' prior knowledge and provided information that, she said, would enable them to make prior connections as they read. Kate added this strategy also provided students with an opportunity to organize their schema and to begin to ask questions about information needed to clarify for understanding. Teacher prompts are used: "Do not get stuck just on questions." When asked, Kate said she wanted students to explore their own thinking, to see that which they already knew, and not focus only on what they did not understand. Kate then directed

students to share their thoughts and feelings with one another, which she stated would help them expand their understanding of the photograph before they discussed it as a class.

After ending student discussions, Kate asked students to “Put a star beside which questions you really want to know the answer to. Which ones would take priority?” Kate orally gave a few of her own questions as models for student work. She began class discussion about the photograph with a statement made by a student: “It sure didn’t take place in the twentieth century.” Kate led this discussion by probing students. One statement noted that the photograph was in black and white. Kate responded by saying, “But I can take a picture and make it black and white today. What else do you see?” After a few minutes of students sharing questions and ideas, Kate moved on to the next photograph she wanted to display and repeated the process, asking students to write down thoughts and questions, making a list for future exploration. She set a timer for five minutes and directed students to use the time well. During this time Kate reminded them, “It isn’t about the quantity, think quality. One or two good questions are much better than a list of questions.” Kate directed students to return to original groups and instructed them to share their questions and insight. Kate circulated among groups monitoring student behavior and ensuring students complied with classroom rules. After several minutes, she asked the class to return their attention to her. Several questions were listed:

- Why is there a hole in the ground?
- What season is it?
- What is the person doing?
- What kind of dogs are they?

- Where are they going?
- Is there snow?
- What kind of supplies are they carrying?

One of the questions was a higher-order thinking question. The rest are recall questions that are easily answered. Kate asked for quality questions and received them at the lowest level of Bloom's taxonomy. After discussion of the questions students created, Kate collected question lists from students and did not refer to those questions in any other lesson.

After collecting question sheets, Kate stated, "I chose pictures that relate to our story. What are they going to pull?" After a brief discussion, Kate displayed the book, *Stone Fox*, for students and said, "We are going to be starting tomorrow, but we still need to build background about the story." She showed the cover of the book and asked recall questions: What is on the cover? What does Ms. Kate like to do? If I want to read information about the story, where would I find that? Kate reminded students, "Even if you are choosing a book to read, it is good practice to read the information on the back." She then read aloud the back cover of the book and asked students, "How many of you are intrigued? We will start reading tomorrow." The discussion ended.

While Kate employed a student to distribute graphic organizers, she searched her email for a PowerPoint presentation created for this lesson. As it loaded, Kate referred to the graphic organizer: "Just sit this to the side of your desk. All this is, today, it is going to be a prediction sheet. Images about what you think the story will be about or, after you start reading the story, snapshot visuals to help remind you of the main things that happen in the story."

Kate displayed a slide on the board with a list of 5,4,3,2,1. She asked, “What does this make you think of?” and a brief discussion ensued. Kate then modeled her own thinking, “Okay, where my thinking goes is, it talks about a race, so a countdown to a race. But I really liked the thought that you all have about time counting down.” She continued to build background knowledge, using the PowerPoint as a guide. As Kate introduced the characters in the book, she set a purpose for student reading: “Here is a challenge I have for you. When we read through the story and we read about the problems that little Willy faces, think about how/would you be able to do the same thing.”

Kate concluded the lesson by having students write a prediction about the story and then instructed them, “I have put a paper on your desk. Think about all of our comforts and the necessities that our parents give us. Think about those things that our parents do for us or give to you. What responsibilities would you be able to do, if your parents became sick? What things would you be able to do for yourself?” She then monitored the room as students wrote. While circulating, she asked one student, “Would you be able to feed yourself? Wash your own clothes? Can you make a peanut butter and jelly sandwich?” Kate gave the students a few more minutes to write and then collected all material and dismissed class.

Upon completion of day one, I requested a reflection from Kate. She replied, “I feel this lesson went very well. I was pleasantly surprised that the students stayed with the topic of discussion most of the time.” When probed, she admitted that students struggled with staying on topic during group work and she was trying different strategies to combat this. This made sense as, during the lesson, Kate spent much of her time

monitoring behavior and not working to increase the depth of knowledge during conversations.

Kate indicated that she really liked using the photographs to activate prior knowledge and to build background information. She admitted, “This was a new strategy for me, but the kids took off with it! This was exciting and I plan to use it again. I think it went well because the students were curious.” She also reflected that she would change the selection of photographs for the lesson because students focused on minor details she did not expect or desire them to focus upon. She also divulged that this particular group lacked high motivation and she realized she spent most of her time ensuring they were engaged in the lesson rather than moving them to think critically. Kate also revealed that she was not in the habit of reflecting on each lesson individually, but more as a whole unit at the end. This correlated with the ratings she gave herself and her reflection on the conditional knowledge and evaluation portions of the MAIT. Kate self-rated as a 4 on knowing when a teaching technique she selects will be most effective during instruction. She also rated herself a 4 when assessing the usefulness of teaching techniques when teaching occurs. She also scored herself a 4 when asked if she has considered all possible techniques after teaching a point. Kate revealed during an interview that she would like to think she uses techniques interchangeably and reflects daily, but she realized during her years of teaching that this is not always the case. She admitted that she often fails to self-reflect due to time constraints and announced this was an improvement area.

Day Two

As Kate specified earlier, the district does not require lesson plans. She submitted a pacing guide at the beginning of the year that specified her core curriculum for each

unit she taught. Therefore, lesson plans for day two consisted of a sheet of copy paper with Day 2 listed at the top. Kate then listed, for the benefit of the study, to read chapter one, post a list of questions and have students choose 5 questions to answer, then group students and have them discuss the activities in the chapter (five minutes). The final item listed on the sheet included: individual chapter summaries and predictions packet. This lesson plan was given to me the day before the lesson was to be taught.

Observations for days two through 10 were conducted through videotapes. As I am an elementary teacher as well, this was an effective strategy to decrease classroom interruptions and to increase student attention. It also was impossible for me as a classroom teacher to miss two and a half weeks of instruction for observation purposes. On day two, Kate was prepared to begin her lesson with the video recorder prearranged in an inconspicuous location in the classroom where I could observe her teaching techniques without observing the students in the classroom.

To begin the lesson, Kate placed herself in the front of the classroom and provided chapter books for each student. She held her copy up for students to see and asked, “Who can do a quick review for me? What do we know so far about the story? What is something we already know about the story?” Kate collected responses and repeated each student’s answer. After two minutes of review, she opened her book and instructed students to follow along in chapter one as she read aloud. When asked whether she ever considered literature circles, Kate replied, “Yes, but I like to read aloud to students because they need to hear a good model and it helps when we discuss the chapter.” When probed, she shared, “I know they have heard the chapter and know what is in it.” As she read about the grandfather in the story, she said, “Let’s stop there for a

second. Now, it talked earlier about how Grandfather's beard was filled with tears. Why?" Students responded and Kate probed, "Do you think Grandfather's beard is filled with tears because he laughed so hard." Students shared their thinking and Kate responded, "So, you don't think these are happy tears? What kind of tears could they be? Let's see." She continued to read aloud from chapter one.

As Kate continued, "He (grandfather) is healthy as an ox," students said, "DING," and Kate stopped reading and responded, "Okay, we just 'dinged.' Somebody tell me why." Kate explained she had taught students to identify similes and metaphors during a previous unit of study. She also indicated that this was the learning target for the last chapter book, and she decided to carry that focus over into this unit. However, no discussion was held with students as to their purposes for reading or the learning target RL 4.3 describing in depth a character, setting, or event in the story and drawing on specific details from the text (e.g., a character's thoughts, words, or actions) that Kate specified in her pre-observation discussion and lesson planning. She reviewed similes and metaphors using this example, which included brief student input. This discussion became a segue for activating prior knowledge with students as Kate began an inquiry with students about a doctor's primary purpose. Text-to-self and text-to-world connections were made, and Kate continued reading aloud.

Upon conclusion of the chapter, Kate directed students' attention to the board and explained that there were 10 questions posed on the board. She read each and students were asked to select five to answer from those listed. Kate shared with me that she purchased these chapter questions from a teacher created website. I then asked her to describe the process she used when selecting materials from sites such as these. She

replied that she looks at several different offerings from the site and chooses the set that best aligns with the concepts she wants students to learn. Kate then asked students to verbally share models of ways to restate questions when answering, but none were written on the board for student reference. Kate then scribed for an individual student while others worked independently.

When the task was completed, Kate collected student copies of *Stone Fox* and student work was placed in a basket at the front of the room. She then arranged students into groups and reminded them that the previous Tuesday's lesson was on summarizing. Kate began instructions for group work:

“Remember, a summary is where you give a short version of the story. Okay, so, what I want you to discuss for about five minutes in your groups, is to think about all of the things that have happened in this chapter. Talk about them out loud amongst each other. Adding in where you need to and oh, you forgot this. But think about if you had to strip away all those extra details, what would you say this chapter is about? In your groups, I want you to talk about how you are like, remember what I told you that you are supposed to compare yourself to little Willy? How are you like little Willy so far? What are some of the things you learned about little Willy? If your mom and dad or your grandpa or your uncle became ill, would you be responsible enough to get the doctor or be responsible enough to get in contact with the doctor to get help for your guardian? I will give your groups about five minutes to discuss in your groups the happenings of the chapter, what do you think is going to happen next? What do you think is wrong with grandfather? Okay? Go.”

During this time Kate monitored student behavior in groups. One group struggled with discussion and she prompted them by asking some of the questions she shared during group instruction. After group discussion, Kate instructed students to write a three to five sentence summary of chapter one with a brief verbal discussion of that which should and should not be included in a summary of the chapter. “Make sure to check over your summaries for capital letters, periods and complete sentences. Turn your papers to the basket when you get done.” Kate then scribed for an individual student as others completed the assigned task.

Upon reflection, Kate admitted that she felt the lesson “fell flat.” She observed during teaching the lesson that students were more interested in reading the chapter but were less than enthused about the discussion process. She shared that one thing she would like to change about the lesson was that she wants students to be more engaged and motivated, focused on the discussion. She was adamant that she wants students to discuss their learning and to be involved. When probed, she said she did not really know the way in which to do it but would conduct further research as to engaging students.

Day Three

Kate shared lesson plans for days three through seven at the conclusion of yesterday’s lesson. In her plan for day three, she listed:

- A quick review of chapter one
- Read chapter 2
- Summary visualization (think, pair, share)
 - I’m thinking...
 - I’m wondering...

- I'm noting...
 - I'm seeing...
 - That reminds me of...
 - I am remembering...
 - I can relate to...
- Have them respond on notebook paper (five minutes), then pair up and talk with a partner (three minutes). Finally, share out thoughts out as a group (five minutes).
 - Finally, allow students to choose five questions from the list of 10 to complete.

Kate began the lesson by briefly reviewing the previous chapter. “So, let’s start by talking about what happened in the last chapter. I know it was Friday, and it has been the weekend, but a gold star for the student who knows.” Kate continued to scaffold students by reminding them of the chapter title, which was not discussed before reading the chapter on Friday. Few students contributed to the discussion, and Kate continued to ask probing questions to pull students into the discussion.

After chapter one review, Kate instructed students to turn in their books to chapter two and stated, “The chapter title is *Little Willy*. Here we go.” She commenced to read aloud to students. Kate paused to inquire whether students could define “irrigation” as it was used in the text. Kate, nor her students returned to the text to reread the surrounding passage to glean context clues. Rather, she relied on questioning strategies to enable students to make connections and to activate prior knowledge. Once students answered to Kate’s satisfaction, she continued to read aloud.

During the reading, the word harmonica was used. Kate discontinued her reading to inquire the meaning of the word. She solicited student responses, then asked whether they were aware of what a harmonica looked like. Implicit instruction of visualization and prior knowledge were being accessed here, but students were unable to communicate their visualization descriptively. Kate continued to read aloud to students. She stumbled when reading and said, “I can’t spit my words out this morning,” and reread the passage. This was an implicit use of the monitor and fix-up comprehension strategy. Kate continued to read chapter two and, upon completion, announced, “Okay, we are going to stop there for today.”

Kate distributed notebook paper and graphic organizer from day one of the unit. She provided more implicit strategy instruction for visualization as she directed students:

“We are going to do our visual summary of the chapter. You have your visual summary sheet. So, under the two, what would you say? What is the main focus of this chapter? What if I wanted to split this box? What if I wanted to draw two pictures about this chapter? What would be something else I could draw about this chapter...these are your visual summaries. This is for you to look at and if you wanted to say, ‘Oh, yeah, what is this chapter about?’ It will remind you exactly what went on in that chapter.”

As students wrote and placed their completed work in the class basket, Kate displayed on the board the thinking stems listed in her lesson plans. Because of her lesson reflection, Kate provided discussion starters, or thinking stems, that would enable students to be more actively engaged in discussion. Kate shared the thinking stems with students, “I want you to relate these to the story. I am thinking that this is what is wrong

with grandpa. I am wondering why harvesting the crop didn't make grandfather better.” Kate provided implicit instruction by modeling her own thinking for students. She also implicitly engaged students in making connections by stating, “I want you to think about what stories you have read. Think about things you, yourself, have experienced.” Kate prompted students to make connections to their own lives, providing implicit comprehension strategy instruction. When probed, Kate admitted that she just did this naturally and did not specifically think of them as comprehension strategies, she just knew they were good practice for students.

After independent writing time and group discussions, Kate facilitated whole group discussion. Students shared ideas that reflected simple thinking strategies, and Kate inquired, “Would you ever think that a dog pulling a plow makes you happy? No, but whenever you have the background about looking for a horse and having no money and then all of a sudden, here comes Searchlight it puts it all into perspective.” Searchlight, described as Willy's loyal black dog, was a main character in the book. Kate implicitly offered students insight into their own thinking. She continued to lead discussion, providing students with scaffolding to make connections from the text to themselves and to the world. Discussion included the concepts of living alone, having to be up at dawn and do hard labor all day in extreme heat, and providing food for themselves and their family. She asked students to place themselves in little Willy's situation and discussed the emotions that students would feel if they were in that situation. Kate spent much of this discussion providing examples and asking for student input to motivate them to make connections. Kate concluded the lesson by requiring students to select five of the 10

questions provided on the active board and those papers were turned in to the class collection basket.

During the reflection process, I asked Kate if at any time before this unit she had completed a unit with the students over the use of comprehension strategies while reading. She responded, “I have not necessarily done a unit on comprehension strategies as much as just kind of tried to embed it into my regular instruction. Sometimes I use coach lessons, to renew their understanding of a concept like summarizing. Then I just try to hit it several times over the course of the year.” She felt that the lesson went well and that students were actively engaged in discussion over the use of the thinking stems as a discussion starter.

Students turned in several papers during each lesson. When questioned, Kate responded that she grades all papers. She admitted that it felt like a tremendous amount of work at times, but she believes there was no point in completing assignments if they are not valuable enough to grade. She shared that students know she would read and comment on all assignments.

Kate employed the same instructional strategy at the end of each lesson, having students choose five of 10 chapter summary questions. When asked, she divulged that she “actually liked” using this strategy. When probed about student choice of answering recall versus critical thinking questions, “I find that students are actually completing a mix of questions. They are not just choosing the recall questions. In fact, I have some going above and beyond to answer more than the required number of questions.” She reiterated that this has never been an issue, even though in previous discussions she found it difficult to motivate some on occasion.

Day Four

Day four lesson plans were similar to day two and three with one change in strategy instruction. Kate provided handwritten lesson plans that included:

- Quick review
- Read chapter 3
- Summary visualization
- Journaling: This chapter employs a cliffhanger... where you are left in suspense as to what is going to happen next in a story. Predict what you believe is going to happen next in the story. (five minutes)
- Next, compare your predictions with the group. How was it similar/different? Draw a line under your prediction and reflect on your group responses. Do you still feel your response is what will happen or do you like your partner's idea better? (five minutes)
- Share out a few ideas
- Comprehension choice questions (five of 10)

Day four began with Kate eliciting review summaries from a variety of students. Kate did much less prompting and questioning during this review. As she opened her book to read aloud, she revealed that the title of this lesson's chapter was *Searchlight*. Students responded by describing the black dog with a white spot on its head. She added, "I thought that was a good idea. Okay, we are on page 20. Are we ready?"

Kate began to read aloud to students. During the read aloud, she misread the text, apologized, reread the text, and continued. Minutes later, she declared:

“Let’s stop there for just a second. I am going to go back and read that sentence. It carries a lot of weight these days. ‘All little Willy wanted to do was grow potatoes but he respected his grandfather enough to do whatever he said.’ How many of you all would be willing to do something that your parents wanted to do, but you didn’t want to do? Some of you? Now, let’s be honest. How many of you all, when your parents or grandparents tell you to do something, you don’t listen? Here’s the thing, back then, you do what you were told. It was not, oh I’m not going to listen to you because I want to do what I want. You listened, that was respect. How much better would it be if we just listened sometimes and gave respect to the adults in our lives? But for some reason, we want to test those bounds. Rolling eyes is a form of disrespect too. Okay, back to the story.”

When asked about the reason she stopped at this particular sentence, Kate thought it was important for students to understand the difference between today’s culture and years past. Kate implicitly asked students to make connections to their own lives to understand the text, but she did not make the connection herself when reflecting.

During the final portion of this read aloud, Kate presented students with their first deliberate use of visualizing as a comprehension strategy. As she read, she exclaimed, “Okay, let’s get that image in our minds! Their hands were as pink and soft as a baby’s.” She continued the instruction by posing a series of questions to students that stimulated the visualization of this particular topic. When asked, she shared that her purpose was for students to see that each person’s hands represent the life we live, what we do for a living, and how physically demanding our work or life is. Kate then continued this mini-lesson by asking, “Okay, so you should get an image in your mind of what these people

looked like.” She asked students to compare and to contrast visualizations of “city slickers” and “farmers” in order to more deeply understand the main characters’ lives.

Upon completion of chapter three reading, Kate instructed students to complete their visualization summary graphic organizer. She elicited responses from students about possible drawings. While students worked, Kate asked them to recall a line from the story, “It was a race against time, a race against themselves, a race they always won.” Kate provided wait time for students to ponder her question as they worked. She then inquired, “What do you think that means?” Students responded and Kate repeated their statements. During this mini-lesson, she revealed that the statement is foreshadowing and continued providing a definition of foreshadowing to clarify student understanding. Kate continued to scaffold student understanding until they arrived at the outcome she anticipated. She then provided students with time to complete their drawings for chapter three, as she prepared for the upcoming segment.

As students finished their graphic organizers, Kate displayed a journal prompt on the active board. She explained to students that this particular chapter ended with a “cliffhanger” and proceeded to elicit responses as to what that might mean. She then directed students, “You are going to predict what you think is going to happen next.” Kate provided students with five minutes to create predictions as she worked as a scribe for the same student. As they were working Kate noted, “Ah, it looks like some students looked ahead in the book. If you are looking ahead, you cannot truly predict.” Kate guided students to work in groups to share predictions and then convene as an entire group to share. Kate spent most of her time during small group discussion monitoring and correcting student behavior. When students re-assembled as a whole group, Kate spent

several minutes asking them to reflect on their group discussion, learning, and predictions. Kate then provided time to answer five of 10 story questions, collected them, and dismissed class.

Lesson reflection included Kate's belief that students are engaged, and she is pleased with discussion and predictions students created. She also extended her reflection by stating that she is extremely pleased with this particular unit, and students appeared to be enjoying it as well. She reflected that she enjoys student shared authentic predictions, yet others "cheated" a bit by looking at the next page. Kate revealed in her reflection, "I cannot think of any way I would really want to change this lesson. It actually went better than I hoped! It was exciting!"

Day Five

Day five lesson plans were similar to day two through four with one change in strategy instruction. Kate provided handwritten lesson plans that included:

- Quick review
- Read chapter 4
- Summary visualization
- What types of words describe little Willy's character so far? Be able to use examples from the text to support your thinking
- Add words to our "Willy poster" as students come up with ideas
- Review static versus dynamic characters with students. Have a discussion as to which one little Willy is. Then ask for suggestions as to which characters could be static
- Comprehension choice questions (five of 10)

To continue the unit, Kate began the lesson by engaging students with a two-minute review of chapter three. She moved the lesson forward by introducing the title of chapter four, *The Reason*. She prompted, “Let’s make predictions about this, *The Reason*. What do you think this chapter is about?” That was the first time during this particular unit that Kate initiated the use of any prediction or pre-reading strategies with students. Kate elicited responses from students and continued using the questioning strategies to engage more students.

Kate read chapter four aloud, stopping once to ask the meaning of the word *derringer*. She quickly completed the read aloud and directed students to work through their visualization summary of chapter four on the graphic organizer provided on day one of the unit. As students worked, Kate drew a figure of a boy on the active board:

“This is my poor attempt at drawing a person...we are going to talk about little Willy. Now, I want you to think back to when we talked about character traits... We have spent enough time reading *Stone Fox* that we can start to develop some opinions about little Willy, like what kind of character he is. So, I want you to tell me, and you have to be able to use examples from the book to explain your reasoning. I need some words to describe little Willy, some traits.”

Kate listed student responses and, as she explained, repeated them for clarification. She stopped and rubbed her hand in the air around her head as a visual cue to prompt students, “Stop for a moment and organize your thoughts.” Kate then called on another student. She inadvertently was giving students a metacognitive cue. When asked, she replied that her purpose was to get students to focus on the task at hand. Kate also required students to provide evidence from the text to support their answer, which

increased students' ability to make connections with the text and to draw inferences. Kate also acknowledged student thinking during this discussion, "I really like where your thinking went there." She also provided scaffolding through questioning when a student was unable to recall a previously studied word. She prompted, "No one else can give me that word, I want to see if student x can drag it back out (of his brain) because if he can, he owns that word. Those of you who remember it already own it. Now, student x, explain your thinking." Metacognitive awareness was evident in this lesson, although not directly or explicitly taught. Over the next six minutes, Kate used metacognitive strategies inadvertently to try to scaffold student thinking while encouraging them to probe deeper into little Willy's character. The script of those six minutes were as follows:

Teacher (T) repeats a student response, "He is ready to survive the winter. What are some other things he might be ready for?" Student responds (SR) T, "Okay I really like that. That is a good word to describe him and I really like where your thinking went there. Because he is kind of ready to pitch in wherever he needs to. He was ready to help take care of Grandfather without someone asking him to. He is ready to take on all of those things. I like that. Next?" SR. T, "Okay, so what is a word that we would use to describe that?" SR. T, "Hold on just a second. You have a wonderful opportunity to reuse a word you might have just learned. If you can remember what that word was. You all just asked me what did that mean. I used a word to describe you all." T gives wait time. "Hang on, okay student x, I am going to write it down and a dash and if you can come up, no one else can give me that word. I want to see if student x can drag it back out because if she can, she owns that word. Those of you who remember it already own it, especially

if you use it. Now, student x, explain your thinking.” SR. T repeats, “Now, T calls on new student. SR. T repeats, “Strong, explain.” SR. T, “Now it wasn’t over 100 yards. Did it every really tell us how many acres? No, good.” SR. T repeats, “Respectful, explain.” SR. T, “Can you think of the exact example from the story when Grandfather was telling him what he wanted him to do and little Willy didn’t necessarily want to do it but he was going to do it anyway? Can you think on that? Stretching those minds... Okay, I am going to come back to you on that.” T, “Anyone else?” SR. T repeats, “Responsible.” SR. T asks, “And did he have to be told to do the chores?” SR. T repeats, “No, because Grandfather is sick. How many of you all would really be able to do that? You get home from school and automatically go do your chores without someone standing over you saying go clean your room, go take out the trash, go do the dishes.” T, “How many of you would probably be like, ‘Oh, I have got some time. I am going to play on this for just a little while.’ Oh, two honest people in this room, mm-hm... It would be hard, right? It shows that he is very responsible. Next?” SR. T repeats, He’s fun, explain.” SR. T adds, “He remembers even though he is doing all of these responsibilities, that are adult responsibilities, he still remembers to be a kid. Next.” SR. T, “I think what you are trying to get to is courageous, explain.” SR. T, “So, I can see that he is willing to race him in the dark. Does anyone else have something to add?” SR. T, “We are just basing this on what we already have read. Anyone else?” SR...T, “So these are all different kinds of words that describe LW.” T repeats all the words she wrote on the outline of LW on the board. T,

“Now, when we talked about characters before, we talked about two different kinds of characters: Static and dynamic characters.”

During this discussion, Kate employed multiple metacognitive comprehension strategies to work through student thinking on the subject of character traits.

For the final activity, Kate asked students to “determine in your mind” if little Willy would be categorized as a static or dynamic character based on discussion criteria. After giving instructions, Kate directed students to move to one side of the room if they believed little Willy was a static character, and travel to the opposite side if they thought little Willy was a dynamic character. Kate prompted students, “Think about static. Have you ever seen static on the television? It never changes, it stays the same...I want you to determine, in your mind...” She sent students who were uncertain to the back of the room to listen to discussion before making a decision. She then prompted students to discuss their ideas and persuade the other group to see their perspective. Students shared their opinions and she instructed those in the back to make a decision based on student arguments and select a side, while allowing others to change sides if they were also persuaded. Kate said, “Okay, I have your four in my mind, and I have all of you in my mind. We are going to continue to read the story and see how it plays out. We will return to the idea of him being a dynamic or static character as we read.” Kate concluded the lesson by having students select five of the 10 questions presented from the chapter. Kate instructed students to write their answers on notebook paper and turn completed work in to the classroom collection basket.

As Kate reflected upon this lesson, her first observation was “some students were pleasantly surprised to learn their predictions about the tax collector were correct.” She

then disclosed that she “liked” the whole group discussion brainstorming character traits for the main character. “If I were to do the lesson again, I might would have each child to independently brainstorm their own words, then present them to a partner and then a small group.” Kate added that she would even like to extend the activity to have them select one word that they believed best described little Willy. Kate concluded her reflection by pointing out that she assumed students “seemed to really like the group time and reflection time. However, they are getting more chatty!”

Day Six

Day six lesson plans were similar to days two through five with one change in strategy instruction. Kate removed the summary visualization from her lesson plans. When probed, she shared that she believes this strategy is confusing to students and interrupted the flow of the lesson; she decided to remove it entirely. Kate provided handwritten lesson plans that included:

- Quick review
- Read chapter 5
- Think-Pair-Share:
 - Why do you think the title of this book is *Stone Fox*?
 - What do you know already?
 - What is coming up?
- Pair together and discuss your reason. Come up together with the one you think is the best from the two of you.
- Share out all ideas
- Comprehension choice questions (five of 10)

Kate began the lesson by asking, “Someone tell me what was the chapter titled *The Reason* for?” After soliciting answers, she queried, “Do you think the tax man was afraid of all dogs, or just afraid of Searchlight?” Student responses were discussed and then Kate moved on, “So, we are going to read chapter 5, which is titled *The Way*. Ready?” Kate read aloud to students. During the story, Willy’s grandfather is non-responsive. She discontinued reading to inquire, “Why do you think Grandfather is not responding?” She collected student responses quickly and continued to read aloud. The lesson came to a halt when one student became ill. Kate handled the situation deftly and continued to read aloud. Stone Fox, the Native American, was mentioned for the first time here, yet Kate continued to read even though students called out their realizations. When she completed her reading of chapter five, students mentioned Stone Fox again and Kate replied, “Yes, the next chapter is *Stone Fox*.” When questioned, she revealed she was still reeling from the situation with the nauseous student but had to continue teaching.

On the interactive board, Kate displayed the questions, “Why is the title of the book *Stone Fox*?” Kate instructed a student to read the question on the board and then inquired, “What do we already know? What do we know is coming soon?” She provided students with five minutes of “reflection time” to respond in writing to the question she posed. She then explained, “Now what you are going to do is pair. I want you to share your ideas together. What do you think is coming up in *Stone Fox*?” She then instructed students to share all of their ideas with their partner and select one reason that they believed the book was entitled *Stone Fox*.

Class was interrupted a second time as students were asked to prepare costumes for an upcoming play. When they returned, Kate reminded them to continue their discussion of the prompt. After several minutes, she asked students to reconvene and solicited responses from pairs. Kate listed each response on the interactive board. When student share concluded, she summarized her own thinking:

“Lots of you have similar ideas. One of the resounding ideas I am hearing is that Stone Fox is a character in the book. But you have to analyze and you really have to dig deep. Why would the book be called *Stone Fox* when little Willy is the main character? Why is it not called *Little Willy*? What is the only thing that is going to be standing in little Willy’s way of winning that race? I heard several of you go, ‘Oh!’ Why did you do that? Think about that. The reason the title of this book is called *Stone Fox* is because Stone Fox is what? He is the one thing that is standing in little Willy’s way of saving his grandfather, of saving the farm, and paying the taxes. Because if Stone Fox, who has never lost a race, wins, then little Willy’s hopes will be dashed, and he will have to sell the farm.”

Kate provided students with the answer to the question she posed because student responses lacked depth of knowledge, analysis, or evaluation. Kate then shared 10 comprehension questions with the class and asked them to respond to five and turn in their writing upon completion. During reflection, Kate disclosed that this lesson was very difficult for her. She honestly shared, “I fearfully inform you that we had a big show for you today...from a kiddo getting sick, to interruptions in the lesson to prepare for their related arts performance, and anxious energy from students because of their performance. I hate that you have to watch this lesson.”

She continued by admitting that she does not believe students are “quite” ready for the deep thinking related to the main question of this lesson. Kate shared that she hopes they are able to conclude on their own that the book was named *Stone Fox* because he represented the only thing standing in Little Willy’s way. She ended her reflection by revealing; “I need to try to figure out a way to get them there without so much leading.”

Day Seven

Day seven lesson plans, similar to days two through six, were handwritten on notebook paper in bulleted fashion:

- Review
- Read chapter 5
- What do you think little Willy is thinking?
- Now that we have had some time reading this book, what do you think is going to be the end result of this book?
- Group discussion. Reflect-How did your group members support or change your decision?
- Comprehension choice questions (five of 10)

To commence lesson seven, Kate conducted a brief two-minute review of the previous chapter. She began by asking, “What happened in the last chapter, *The Way*?” After collecting student input, she drew students’ attention to chapter six entitled *Stone Fox*. Kate made a connection to the title of the book. After she fielded a few questions from students, she began to read aloud. Kate discontinued reading to ask students to compare/contrast her own desk with the scene she was reading in the book. Students responded to her question, and she continued to read aloud. Kate halted once more to ask,

“What do you think it means when I read, ‘You must be funnin’? What would be another way to say that?” Students responded correctly, and Kate continued to read aloud.

Students interrupted Kate once more with a ‘ding’ sound, indicating they have identified a simile in the text. She discussed the simile and its meaning with students. While Kate continued her read aloud, she implicitly modeled a comprehension strategy to students.

When asked, she replied that she does this out of habit, as it is “good modeling for students.” As she misread the text, Kate exclaimed, “Whoa, wait!” and revisited the text to self-correct but never deliberately discussed the purpose for this strategy with students.

Kate continued to read aloud and stopped to refer to a passage in the text, “Okay, so let’s talk about that.” Yet, when she began the discourse, she conducted a monologue rather than a discussion with students. She read another passage and asked:

“What kind of look do you think he (Stone Fox) has on his face? You all give me your best idea of what you think Stone Fox face looks like. Do you think he was smiling? I see some serious faces, faces that mean business. So, you know he probably didn’t look like the friendliest person in the world, right? He probably didn’t look like you would want to go up to him and say, ‘Hi, how you doing?’ He probably looks pretty intimidating, pretty scary. Okay, let’s go on.”

Kate implicitly initiated a visual cue for students in this part of the lesson.

However, after initiating the cue, students showed her their faces and she described them, spending two minutes on this query, although instruction was not explicit. Kate continued with the passage and stopped briefly to ask students (implicitly) to make predictions and to momentarily discuss a vocabulary word (granite) but moved on quickly. When the

page was turned, Stone Fox was revealed in an illustration on page 52 of the text. Kate made no mention of the illustration, although students reacted to it verbally.

Kate concluded the reading of chapter six and asked students to direct their attention to the two questions on the active board. Her directions were as follows:

“Okay, so I am going to put two things on the board, and I want you to really stop and think about what you are going to respond. Let me say this first, I have had some people, and I used to be the same way too. I couldn’t stand it, I was one of those people when I am reading a book, if I start to get concerned or worried about what was going to happen, oh boy, I was bad for this. I would go to the last page; I would read the last page of that book just to see how it ended before I would finish a book. And I know, there are some of you in here that have done that, or I also know there are some of you who already have. So let me say this, if you are one of those people who already knows how it is going to end, please don’t ruin it for the other people. So, in responding to this, think, you have an extra hard job, you are going to have to think about how you can write your answer without giving it away to the people in your group. You are going to have a group discussion here in a few minutes. So, you have two questions to respond to. The first one is, ‘What do you think that little Willy is thinking?’ What do you think is really running through his mind? If you were little Willy, if you were the character in the story, what types of things would be running through your mind? Would you be thinking, I really really want to win but I think I might lose because he is really really awesome? I mean, think about ourselves, even though we really want to win sometimes, we have doubts within ourselves? Or do you think he

thinks, 'I will win because I am the only one who deserves it?' I deserve to win because if I do win, I will not be using the money for myself. I am going to be using it to save my grandpa. Think about Stone Fox, is he using the money for himself? The other question I want you to respond to, now that we have had time to read the book, this chapter about Stone Fox is a very important chapter. It kind of really gives you some things, this is the first time we have met "The Man" face to face. We have heard about him a little bit, there have been hints about Stone Fox throughout, but this is the first time that we have the idea. How does little Willy describe him? He describes him as a giant. It says that, come here for a second (Kate speaks to a student). We are going to imagine that G here is about the same size as little Willy. So, show me what it would look like if you were looking up at a giant. Look, his head had to go way back, didn't it? Alright, so that gives you some kind of indication, some kind of idea. Thank you. He is big, he is tall, he is imposing. Now that we have had some time to read the book and think about the characters, who is little Willy's main competition? Stone Fox. So, if we had to label little Willy and Stone Fox as protagonist/antagonist who would be who? Why would you say little Willy is the protagonist? Okay, little Willy is the hero. Who would be the antagonist? Stone Fox because he is fighting against the protagonist." Student responds, 'I think both of them are good.'" Teacher says, "Okay, explain your thinking, why do you think both of them are good?" Student responds, "SF is trying to reclaim his land for his people." Teacher says, "So he is not going to win the money to make himself rich, right? But, can somebody be good, but still be that force that is fighting against you?" Student responds,

“Racism,” and gives an example. Teacher replies, “But is it really? That person says, ‘I am just going to enter this race so I can beat you.’ Would that be a good person? Okay, we keep coming back to this question because we keep having these sidebar discussions, I love it. Now that we have had time to read the book, what do you think will be the end result? Who is going to come out victorious? Who is going to be the winner? Is there going to be one winner? Are there going to be multiple winners? Is there just going to be one loser? Are they going to tie? This is what I want you to do, I am going to give you five minutes and you are going to answer both of these.”

Kate reviewed the questions and reminded students not to spoil the end of the book and to write their answer so they do not reveal the ending. She set the timer for five minutes and students worked. This unplanned sidebar lasted 11 minutes. During group discussion, Kate emphasized the importance of students embracing their own thinking, right or wrong. This direct or explicit reminder targeted students’ thinking when writing and sharing ideas. Kate praised student thinking by stating, “I don’t want you to read your answers and say, ‘Okay, I’m done.’ Share your ideas first and then talk about them. Guys, this is your thinking. There is nothing wrong with this. You are all right on track.” When questioned, Kate said she employed this prompt to get students to think deeply rather than engage in superficial discussions. She monitored student conversations but did not ask higher order thinking questions to navigate student discussion in the direction she had initially specified. Kate then gave students time to complete a reflective writing, prompting with the following questions: Do you still feel the same way? Did your group members support you? Did your group members have ideas similar to what you had or

did one of your group members have an idea that maybe you didn't think about? When I asked Kate about the development of these questions, she responded by saying that she made up these reflection questions as she taught, using what had worked for her in the past and adding when needed. Upon reflection, Kate was pleased with this section of the lesson and her instruction. She concluded the lesson with comprehension questions and collected all student papers for grading.

When asked to reflect on the lesson, Kate revealed that she believes the lesson went well. I queried if she had ever thought about implementing the use of reflective reading journals in her classroom and she responded, "I have never used reading journals before, but considering that for the most part, the students have enjoyed responding to the literature, I may look into it." Kate continued her reflection by admitting that she decided to remove the visual summary sheet from the remaining lessons because she 'just didn't know how well it was going.' She was very vague as to why she does not believe this was not an effective instructional tool or if she would use it again. She also remarked that she had decided for the remainder of the unit she would select the five comprehension questions she wanted students to answer; some were not selecting higher order thinking questions to answer and it was an exorbitant amount of work for her outside of the classroom. Kate also shared a response from a student that occurred later in the day that was very telling. She confided that a student confessed, "Oh, now it makes sense as to why you are always asking us why?" Kate's response was, "That is kind of exciting for me." This was an important turning point, as Kate noted that students could draw inferences from implicit teaching, but she failed to glean the power of direct, explicit teaching for all students. Kate also disclosed that she refrains from writing detailed lesson

plans in case she has to “change gears abruptly.” When questioned, she admitted that she likes the flexibility of being able to change it around if she believes students do not comprehend the literature.

Day Eight

Day eight lesson plans, similar to days two through seven, were handwritten on notebook paper in bulleted fashion:

- Read chapters 7 and 8
- Choose one of the quotes from the story to respond to:
 1. “Grandfather says that those who want to ban enough will.”
 - a. What did grandfather mean by this?
 - b. Do you think it’s time? Why or why not.
 2. “There are some things in this world worth dying for.”
 - a. Explain this statement.
 - b. What was Willy looking at as he thought back to this quote from grandfather?
- Teacher chosen comprehension questions

To commence the lesson, Kate previewed the rest of the unit for students. She described that they would be reading two chapters on this day, and they would conclude the reading of *Stone Fox* over the next three days. To review chapter six, Kate posed a question: “What kind of person is Stone Fox?” Students responded with superficial or external details and she guided them to a more in-depth, character trait centered discussion. The conversation centered on the reasons for Stone Fox’ uncommunicative behavior. During this portion of the lesson, Kate guided students to understand the

reasons behind the character's behavior and the ramifications to the rest of the story. However, she never mentioned the purpose for or reasons that these strategies were essential for students to implement before they continued to read.

Kate initiated the reading aloud of chapters seven and eight without any discussion of chapter titles or predictions. During the reading of chapter seven, the author sets the scene for the upcoming race between little Willy and Stone Fox. Kate continued to read aloud and completed the chapter without pause for discussion. When she concluded her reading, she asked students whether they had any questions or thoughts before they continued. Kate was questioned about the clues in the chapter and proposed, "This is race day, yes. So the next chapter will probably lead up to the race starting, and then tomorrow we will read about the race itself." During the reading, this was the only discussion dealing with events from chapter seven.

Chapter eight was introduced when one student mentioned the title and Kate responded, "*The Finish Line*, yeah. Don't you just love these chapter titles? They tell us what is going on, right?" Kate then proceeded to read the next chapter to students. During the reading, Kate described the scene in which little Willy saw the crowd at the race for the first time and continued her read aloud. She interrupted her reading to ask, "They stood nine abreast. What do you think this means?" After soliciting responses from students, Kate used her hand to make a chopping motion, demonstrating that contestants stood side by side. She concluded the read aloud without further discussion.

Upon completion of the chapter, Kate carried the lesson forward by displaying two quotes on the board: (1) "Grandfather says that those who want to bad enough, will." What did grandfather mean by this? Do you think it is time? Why or why not? (2) "There

are some things in this world worth dying for.” Explain this statement. What was Willy looking at as he thought back to this quote from Grandfather? While Kate shared these quotes with students, she remarked, “Both of these really speak volumes. Okay, so you choose which one of those speaks to you the most.” When I asked Kate whether students knew what “speaks to them” meant, she disclosed that she had, in fact, used this term during previous lessons. She stated, “When I first used it with students, I described to them that it meant for them to pick the one that made them feel the most. The one that they automatically felt something upon hearing.” While students wrote responses, Kate scribed for another student. She then paired students and requested that they discuss the reason they chose that particular quote and their response to said quote. Kate worked with the student for whom she scribed, while other students shared their responses. After several minutes, Kate posted the five comprehension questions that she selected for students, gave them time to complete their assignment, and collected their work.

Kate pondered on several questions that I had asked after viewing the taped lesson; she responded with honesty. When asked about the lack of discussion during the lesson, she admitted that she felt pressed for time and adjusted discussion time accordingly. She also confided that she had a “happy teacher moment” when one of her students independently made the connection between the quote, “Some things are worth dying for,” and that which the student knew about upcoming events in the story. She admitted they had a one-on-one discussion about foreshadowing and she was extremely proud of the student. I also was curious about not seeing any discussion, grades, or returned papers. I knew she collected all of their work and I questioned her protocol for the mounds of paperwork. She again stated that she graded all student responses and gave

feedback. She also reported that students received these papers during a separate part of the day to take home.

Once Kate reflected on my questions, she speculated on the instructional strategies she employed during the lesson. She declared:

“By far the thing that I think worked the BEST was the use of the two compelling quotes. I think that both of them were very personal reflective quotes. I also wanted so badly to tell them about how the second quote was foreshadowing, but I didn’t want to give anything away. At this point, many of the students have read ahead to find out how the story ends. If I could change anything about the lesson, it would be to devise some way of keeping that from them. I hate that I feel anxious that someone is going to ruin the ending of the story for the rest of them.”

This reflection was the shortest of the unit. She believed that this lesson was very successful.

Day Nine

Chapter nine lesson plans also were handwritten and concise:

- Read chapter nine
- Respond to the following
 - What is the most exciting part of this chapter?
 - What did you find most surprising from this chapter?
- Group together and share
- Teacher chosen comprehension questions

To begin the lesson, Kate asked a few review questions about chapters seven and eight. The review lasted three minutes and she reminded students that they would

conclude reading of the book during the next day's lesson. As the climax of the book emerged, students became excited about the conclusion of the story and wanted to discuss their ideas. Kate quelled their enthusiasm and began to read aloud. She began by asking who was in the lead during the dog sled race and listened to a few student responses before beginning to read aloud. Kate read the entire chapter, 10 minutes, and concluded without pause. When she finished, she closed her book and looked at students: "I am seeing some excitement going on. What do you all think?" Many students read ahead in their own text and wanted to share what they had learned. Kate cautioned them about spoiling the ending for other students. She elicited thoughts from students that included: worry that bad things will happen, excited that little Willy might win the race, excited that Grandfather was up and moving around during the race, and happiness for the main character. Kate asked, "How many of you were worried when you realized here is Stone Fox, and here is Stone Fox's lead dog and here is Searchlight. Could you just picture it in your head?" This is the first time during a lesson in this unit in which Kate directly referred to a comprehension strategy. Yet, she omitted any discussion about the way this would assist student understanding or purpose for visualization when reading.

The discussion then shifted to little Willy's purpose as a main character in the story as Kate attempted to increase students' critical thinking skills. The discussion was as follows:

"Yes, the main character but what else is he? Oh, come on now. How else can we describe him besides the main character? Yes, he is kind, but I am not talking about character traits, there is another term for a character. He is the what? He is the hero, so he is the what? Protagonist, right. And we talked about Stone Fox,

what character did we decide Stone Fox was? Was he a true antagonist or was he a protagonist? So, he is kind of the hero for his people. So, who is the real antagonist? Probably yes, the taxman.”

Kate elicited responses from students and one stated that she “guessed that.” Kate queried:

“So, what made you guess that? What makes you think that the taxman is the real antagonist? Okay, he is trying to take their farm away. So, this story kind of puts us in a hard place, right, because how many of you are rooting for little Willy but at the same time you think if Stone Fox wins it wouldn’t necessarily be so bad. Why would it? You tell me your thinking.”

Students responded with a paradigm shift. Kate probed:

“You changed your mind. Who do we know more about? Who have we been able to develop that relationship with? Why? Alright, so, do you think that this story would have been different if maybe you developed that relationship with both characters? With little Willy and Stone Fox? How many of you think you would be more torn between the two, not knowing which one you wanted to win. So, a few of you. I like to find out what is going on in those heads of yours.”

Kate continued her discussion with students to increase critical thinking:

“So how many of us have been wore out before, you give it all you got and you are like, ‘Whew!’ So, okay, like in gym, is that what you are talking about? Do you pace yourself? So, maybe Stone Fox has really done a good job of that and that is why he is able to gain on everybody, because as where everybody else did what? Well, did they start out slow at all? No, they just started off, ‘Phew!’ and

gave it all they got (Teacher slaps hands together and pushes one forward in the air to make quick motion) From the beginning, right, and he waited to make his move until the right time, right? Right, nobody has told you that, right? Okay. Very good, very good boys and girls, very interesting.”

After this discussion concluded, a student asked a question and Kate reminded students of lesson two, in which she asked them to make connections to their own life and to decide whether they were capable of carrying out adult responsibilities, as little Willy did. “You bring up a good point, we haven’t talked about that. Listen, way back in the beginning, I asked you all to think about as the story has gone on, you are supposed to be thinking about if you would be able to do the same things that LW has. Would you be able to do everything that he has done?” Kate selected a few students to share their thinking and they said they would not like or want to complete the tasks little Willy performed. Students also commented on not having proper clothing and worrying about the sickness of grandparents. Kate responded, “Alright, very good. But remember, let’s get back to our question, would you be able to do all of the things that LW has done? I want to hear your thoughts on it, compare yourself to little Willy.” As the discussion continued to be led by Kate, students shared one idea at a time with many interrupting with their own thoughts. After listening to student responses, she moved on without response to their insight and asked them to respond to two questions: (1) What is the most exciting part of this chapter? (2) What did you find most surprising from this chapter? When a student asked whether they were allowed to do both or just one, Kate replied, “It isn’t are you allowed to, I am expecting you to answer both. So, five minutes. Let me

start my timer. I want you to answer both of those questions starting right now. Go.”

Kate scribed for one student while the others worked on answering the questions posted.

As the independent activity concluded, Kate asked students to share their responses and then quickly moved the lesson forward and posted five comprehension questions for students to complete. The lesson ended as they turned in their written responses. Upon reflection of this lesson, Kate was very candid when she began her journal writing with, “ONE WORD: DISASTER!!!” Then she continued by reprising her statement, “Well, maybe it wasn’t as bad as I make it out to be, but today was yet another one of those days that makes you, as a teacher, want to crawl under a rock!” Her main concern was that students were “very chatty” during the lesson. She stated that they were talking over one another, and one read the last page of the book and threatened to tell all the students at lunch. To make matters worse, Kate confessed, a student became ill and she had to have janitors clean up during the lesson. Kate admitted she was mortified that the lesson was videotaped because of all of the “distractions.”

Kate said that she was impressed with students’ ability to make connections when comparing themselves to the characters during the race. She stated, “It was awesome to get insight into what they thought they could or could not do in regards to what little Willy faced.” She also shared that she wished she had finished the book with students today, as chapters nine and 10 contained the climax and falling action of the book. She believed this would have been a much better way to approach this portion of the story and would have solved some problems with students wanting to share the ending with others.

One insight Kate mentioned that tied directly to metacognitive comprehension strategies was that she believed it had been the best “reading of the book thus far. I think

it all has to do with the fact that I was able to use a bit more of them connecting to the characters.” Kate implemented this strategy during discussion after the reading concluded.

Day Ten

Kate continued sharing lesson plans in a handwritten format, with five days of lessons written on one blank sheet of copy paper. Her notes were as follows:

- Read chapter 10
- Complete a plot chart for the story, individually then together
- Respond to the following:
 - What part of the story was the funniest?
 - Most exciting?
 - Saddest?
 - How would you change the story if you had the opportunity to?
- Teacher chosen comprehension questions

The final chapter reading began by Kate announcing, “This is the moment you have all been waiting for...Just to get you all back in the mood, I am going to go back on the previous page and read you a little excerpt from the last chapter to get us back into it.” When asked the reason for doing this, Kate indicated she wanted students to remember the feelings they had from the end of the previous chapter so she could carry that feeling into this chapter, which was the reason she reflected that she should have shared the chapter with students during the previous lesson. Kate continued to read the final chapter and shared the heartbreaking truth that the dog, Searchlight, perished at the end of the race. As Kate finished the book, she listened to students share their devastation

and questions as they tried to make sense of what they had just heard. The script of that discussion is as follows:

Students asked questions, “Did her heart really burst? Did Stone Fox shoot her?”

Kate replied, “No, Stone Fox did not shoot her, she pushed herself so hard that her heart burst, kind of like a heart attack. It (the dog’s heart) couldn’t handle as much exertion that she put forth and it killed her.” Another student demonstrated understanding by stating, “She gave it her all.” Students had many questions.

Kate responded to a few by stating, “She was an older dog. Do you think if she was younger she could handle it?” Students continued to answer while others asked many questions at once, “Well, what about Grandfather? Who won?” Kate replied, “Well, this is one of those books that does not tell us everything that happened. So what do you THINK probably happened?” Students were incredibly reactive to the book and had many questions and ideas they wanted to share.

Kate reminded them, “I know this is awful and it makes us sad, but I chose this book for a reason. Is the ending happy at the same time that it is sad? Why is it happy?” Kate led a short discussion with students about this idea and concluded by saying, “Part of the reason I chose this book was that all of the books that you all have ever been exposed to in your life have all had really super happy endings where everything works out...but that is not real life.” Then Kate proceeded to reflect on the quote from lesson eight: “There are some things in this world worth dying for.” This discussion, not mentioned in the lesson plan, tied back to a previous lesson, as is best practice. She reminded students about chapter eight foreshadowing the events of this chapter, “The book was kind of telling us back two chapters ago what was going to happen, right?” She

then asked students whether the story would have been different if Searchlight was human rather than little Willy's pet. She proposed, "If Searchlight was able to talk, and tell us what she was thinking, do you think that she would be okay with the fact that she ended up dying to save her little boy?" Discussion ensued. As the discussion began to build, Kate asked, "If you have a pet at home, are they your pet or are you their pet? Think about it." This part of the discussion lasted for seven minutes. Kate continued by asking students whether they would be willing to die to save their family. She solicited reflections from two students, then concluded the discussion to return to the focus of the lesson.

The lesson continued as Kate modeled a plot summary chart on the board for students to copy on their notebook paper. She labeled the parts of a story on the chart, as students did the same, reviewing the meaning of each part. Kate modeled metacognitive functions in which she noted that students struggled with determining the rising action. She provided students with a strategy to assist them in completing the chart by directing them to label the climax first and then work on the rising action and the falling action. She shared her own thinking that, if students could define the climax, it would be easier to identify and separate the actions that came before and those that followed.

As students completed their own chart, Kate solicited student responses to complete a summary of the book, using the plot summary chart. She utilized a list format to record student answers during discussion. At no time during this part of the lesson did Kate define the purpose for the chart or the reason for completing a summary, as a comprehension strategy, for increased student understanding. To conclude this portion of the lesson, Kate requested that students self-assess their plot summary chart for content.

She directed students to score themselves a 4 if their summaries contained all of the information she listed on the board or a 1 if they had minimal information written on their paper. Again, no mention was made of the purpose of this activity. The lesson concluded with students completing and turning in five comprehension questions.

No purpose was set during the lesson. Therefore, I asked Kate about her purpose for using the comprehension questions at the end of each lesson. She responded that her focus was to use those question sets for assessment purposes. She wanted to see when students comprehended the reading. She also mentioned that, upon further reflection, she discontinued the use of the visualization summary because, “I was afraid that it was taking away from the lesson instead of adding to it.” When I probed further, she stated that she felt it was becoming more of an add on or thing to do, rather than an integral part of each lesson, so she decided to terminate its use. Chapter 10 reflection was extremely brief. Kate stated that students were very responsive to the final chapter and she was pleasantly surprised that they asked whether there was a sequel to the book. She admitted she did not believe she would change anything during the final lesson before the review. When asked the purpose of the reflection questions, she shared that she wanted to give students an opportunity to react to the book in writing.

Days Eleven and Twelve

Kate’s final lesson plan included handwritten notes for the last two days of the unit over *Stone Fox*. Her notes were brief and contained the following:

- Study guide
- Hollywood Squares
- Review of book

- Stone Fox Test!

Kate began the final lesson by announcing, “So, today is our review day and we are going to play Hollywood Squares.” When asked, Kate shared that she had learned of this game at a professional development training she attended during the year. She described the rules/instructions of the game and selected several students to move into positions on a tic-tac-toe board. The remaining students were divided into two groups and asked to listen to the questions and answers and be ready to agree or disagree with evidence as to why. During the review game, Kate used questions from the study guide she prepared before the final lesson. When asked, she disclosed that she had used pre-made assessments she located on several websites and combined pieces of each to create a test that best fit her needs. She admitted that she did not directly align her assessments with the Common Core curriculum but with what she deemed important for students to understand. She also shared that she did not create assessments prior to teaching the unit. After concluding the game, Kate directed students to their seats, passed out study guides to be taken home, and read aloud the remaining questions on the study guide while sharing correct answers with students. The lesson ended when the study guide was completed. Kate planned to administer an assessment on the final day of the unit.

Kate shared her thoughts on the unit in her final journal entry. She decided that the lesson was a bit chaotic, but the review went well. Her main reflection was that she should determine a better strategy for keeping track of the x’s and o’s on the tic-tac-toe review board. She believed that the students enjoyed the game and had “lots of fun” reviewing.

Data Analysis

During data collection and analysis, patterns emerged that pointed to Kate's metacognitive awareness during classroom reading instruction. While Kate admitted she did not remember any formal training in metacognitive practices, she rated herself high in most all areas of the MAIT scale. First, it was evident Kate used metacognitive strategies in planning, materials selection, and classroom strategy instruction. Second, she understood expectations for teaching and could articulate her reasons for material and strategy selection during this literacy unit. Third, Kate collaborated with colleagues to implement new instructional strategies, to time for students to synergize, and to teach students procedures for synthesizing information. Fourth, Kate demonstrated her metacognitive knowledge through flexible planning, using comprehension strategies that were not indicated in the lesson plans, and deftly handling interruptions that could potentially distracted students and disrupted classroom instruction. Fifth, she utilized instructional time for small group and whole class discussion. These patterns of analysis of Kate's metacognitive awareness were evident during planning and classroom reading instruction.

However, missed opportunities existed for metacognitive comprehension strategy instruction during the observation window. First, Kate admitted that she never explicitly plans, discusses or reflects on her Common Core goal. Rather, she uses student feedback and student attitudes to drive her instruction. She spends a minimal amount of time planning and nominal time purposefully reflecting on lessons and student achievement. Rather than seeking out new and effective resources that target her CCSS, she often utilizes materials that were successful in previous lessons. Poor planning led to missed

opportunities to revisit instructional strategies throughout the unit to expand students' depth of knowledge. Kate had difficulty providing intentional instruction that made invisible processes accessible to students.

Next, Kate demonstrated her struggle with time management. Due to lack of proper planning, Kate also fell prey to time management issues. She often admitted she did not follow her pacing guide and during observations, often she would get off topic for large chunks of time. Another missed opportunity during this study occurred as a result of Kate's beliefs about her students' reading ability. Students were never allotted time for their own reading of the text. Kate shared her belief that teacher read-aloud is essential to ensure all students understood the information. Therefore, she reads one chapter aloud to students each day. She also chastises students who eagerly read ahead in the text. Kate does not plan for or provide class time for students to become actively involved in the reading process. Students are unable to explore the text, utilize comprehension strategies independently, or increase their reading proficiency during this two-week unit.

Kate utilized many "comprehension" activities that are actually assessments in disguise. These ideas/topics are never revisited during class to deepen or expand a student's understanding. All students often are compliant, but not all demonstrate a deep understanding of the content. Several missed opportunities occurred for metacognitive comprehension strategy instruction during the course of data collection, which would have provided students with opportunities to create deep and meaningful understanding of the text.

Finally, self-reflection was an issue with Kate. She admitted she is not in the habit of reflecting on lessons, instructional strategies, or student achievement. Most of her

reflection focuses on student “feelings” and student reactions to the lesson. The data showed that Kate does not possess essential understanding of metacognitive regulation, specifically in the area of evaluation. This unit provided insight into patterns that emerged pointing to Kate’s lack of essential knowledge about teaching and learning. Through interviews, observations and reflective journal entries, I have provided an overview of a typical unit taught by a “highly qualified” fourth-grade teacher. Interview and reflections documented Kate’s thoughts and perceptions of metacognition and its role in classroom instruction. This unit was a glimpse of literacy instruction in her classroom. This introduction to Kate demonstrated that which she believed to be important about teaching and the way in which limited time, a lack of training, succinct planning, and limited reflection played a role in hindering her ability to effectively use metacognitive strategies. While differences can be seen in the personalities and instructional styles of all teachers, patterns in Kate’s instructional style began to emerge while conducting this unit. Similar to all teachers, she was accountable for the state testing system, Common Core curricula, and best practice instructional methods. Yet, her individuality provided insight into her priorities in teaching literacy. The next chapter delves into evidence of Kate’s metacognitive awareness during literacy instruction and any missed opportunities to implement metacognitive instructional strategies.

CHAPTER V: CONCLUSIONS

This study analyzed and identified the themes and patterns that focus on metacognitive awareness evident in classroom reading instruction. An additional purpose of this study was to examine the alignment of teacher perceptions of metacognitive awareness with classroom instruction and to identify those deliberate teaching opportunities missed when comprehension strategy instruction is transpiring in the reading classroom. The qualitative data gathered from teacher descriptions, classroom evidence, lesson plans, and reflections were compared to observation data and metacognitive awareness, which revealed missed opportunities. Patterns of metacognitive awareness and implementation of comprehension strategy instruction were identified through analysis of field observations, interview transcripts, videotaped segments, and reflective journal entries. These patterns were shared through observational snapshots of classroom instruction and provide a glimpse into the way in which the teacher addressed literacy instruction in her classroom. The patterns are discussed as they relate to the field of metacognition using Balcikanli's Metacognitive Awareness Survey for Teachers (MAIT) as a guide and as implications for teacher education programs.

Findings

Metacognitive Knowledge and Regulation

Metacognitive processes are critical for successful strategic reading. Miller (2013) shared, "When we began to pay attention to what was going on inside our heads as we read, we were amazed at what we learned about ourselves as readers" (p. 15). Teachers get to know themselves as readers only when they are able to consider the implications of the research for classroom instruction. First, a teacher needs an awareness that metacognition

exists, an understanding of the way their own reading ability is affected by comprehension strategies, and the ability to monitor and to evaluate that knowledge before high quality strategy instruction can occur.

Kate, the case study, considers herself highly aware of metacognitive processes used by teachers. When rating herself on metacognitive knowledge, Kate stated that she is proficient in declarative and conditional knowledge. She admitted she is unsure of the role of procedural knowledge but rates herself high in all areas, with the exception of automaticity of strategy use. Duffy (2005) noted, “The distinguishing feature of a metacognitive state of mind is a propensity to act on one’s own authority. You decide, rather than waiting for someone else to decide for you” (p. 299). In this situation, Kate determined that her strengths lie in knowledge of her own teaching style and her ability to use that knowledge to be effective; she is aware that her weakness lies in being able to identify exactly those strategies she is using during any given lesson. Therefore, Kate believes she possesses high metacognitive knowledge as demonstrated by her answers on the MAIT.

During the initial interview, Kate was asked to describe a typical day in her literacy classroom. She demonstrated metacognitive knowledge when she shared her reasons for selecting chapter books for each unit of study. She is aware of that which she is expected to teach (declarative knowledge) and her reasons for selecting each book (procedural knowledge). She shared that she chose the *Whipping Boy* to teach students about literary devices, which she added is a Common Core standard. The National Reading Panel (2000) concluded that teachers must be able to judge the quality of the literature they select and to use it to develop curricula and teaching methods based on the

soundest and most scientifically rigorous studies. When Kate was asked the way in which she determines her materials to be of high quality, she said she searches for those that have been used by other teachers, assessments, and materials that encourage students to become deep thinkers, as well as a variety of materials that have been effective in previous lessons. Kate explained that she likes to read the text aloud to students to ensure their understanding of the text and to provide them with proficient modeling of fluent reading. She believes it is essential to require students to complete comprehension assessments after reading. She indicated she utilizes a variety of activities during this section of the lesson to ensure student engagement and to prepare them for the next lesson. These statements supported her awareness of her personal declarative knowledge, but also spoke to her procedural knowledge, which she believes is an area of weakness.

Kate continued to demonstrate metacognitive knowledge during her initial interview and lesson planning. During the discussion, she described her desire to use a new teaching strategy she had learned during professional development opportunities. Kate desired to display two photographs she believed would activate student prior knowledge and move them toward a discussion of the text they were about to read. With this activity, she demonstrated her procedural knowledge to plan teaching techniques for specific reasons, such as stimulating prior knowledge. She also demonstrated her conditional knowledge, determining the proper teaching technique to use during each situation. Harvey and Goudvis (2007) asserted that facilitating connections between a reader's knowledge to new information is the core of learning and understanding.

During actual classroom instruction, Kate planned many instances in which students are able to work together to share ideas and to discuss their thinking. When

questioned, she shared that she wants students to explore their own thinking and to share their thoughts and feelings with one another in order to expand upon their current knowledge. She stated that she learned this strategy several years ago and found it effective in classroom instruction, but also admitted she is unaware of the research that supported the strategy. Keene and Zimmerman (2007) declared that readers summarize or synthesize information to glean understanding and to capitalize on opportunities to share ideas and information from books they have read that will then extend the literal or inferential meaning of the text. While Kate is unaware of the research supporting her teaching strategies, she is cognizant of the importance of implementing these techniques during classroom instruction.

Another recurrent instructional strategy Kate implemented in her classroom during this unit led to her understanding of procedural knowledge. In the previous unit she taught her students to identify and to sound off when they recognized similes and metaphors in the text. While reading the current selection, Kate reminded students of the review standard at the beginning of the unit. Students sounded off when they identified a simile or metaphor in the text and Kate would then pause to discuss. She stated that she tries to use teaching techniques that were effective in the past to reinforce and to review ideas previously taught (procedural knowledge). She felt this is a profitable use of instructional time. Shraw (1998) discussed the importance of procedural knowledge to reflect through strategies that lead students to resolve problems that arise, such as a lack of understanding or a misunderstanding. Again, Kate knew she wanted to use this teaching strategy because it had been successful in the past, although she is uncertain of the reasons it was effective.

Kate demonstrated her ability to effectively apply her own metacognitive knowledge during daily instruction. As she indicated in the initial interview and subsequent lesson plans, she believes in flexible planning to capitalize on teachable moments throughout the unit. During day four instruction, she paused several times to conduct mini-lessons, not originally specified in lesson plans. First, Kate asked students to think about and discuss this statement, “All little Willy wanted to do was grow potatoes but he respected his grandfather enough to do whatever he said.” She asked them to make inferences and connections between the text and their motivations. Later, Kate directed students to “imagine in our minds” the way a character’s hands looked, “pink and soft as a baby,” and again led them to make inferences about the character based on the author’s use of language. The National Reading Panel (2000) shared that teachers must use opportunities as they arise to clarify meaning, as reading comprehension relies on word knowledge and readers may lack relevant knowledge about language, which disrupts comprehension. Kate used mini-lessons and teachable moments throughout the unit, which confirmed her ability to use helpful teaching strategies instinctively.

Gollwitzer and Schaal (1998) focused their research on the action of metacognition. They suggested that, “planning the when, where, and how of initiating goal-directed behaviors furthers goal attainment. The beneficial effects of such planning are expected to operate via automatic processes” (p. 124). Their research proposed that one who encounters the expected activity, the intended goal-directed action commences immediately, efficiently, and without conscious thought. Therefore, a teacher who is metacognitively aware, plans instruction, and searches for opportunities to engage

students in planned instruction, will be able to effectively access strategies. “In metacognitive terms, both goal intentions and implementation intentions are tools used at the metalevel to further desired and prevent unwanted behaviors through automaticity” (p. 125).

Teachers must consciously and daily practice goal setting strategies and intentionally implement those that move them toward their teaching goals. Lesson planning is an essential part of this process. When a teacher becomes proficient at setting goals and implementing quality strategies on a regular basis, dramatic aftereffects occur. Goal-directed behaviors become automatic and lead to stronger implementation intentions. Once goal intentions are firmly in place, a teacher feels committed to execute the plan through specific implementation intentions. As a result, metacognitive awareness of conscious planning, instruction, and reflection become automated, easily accessed, rapidly utilized, and accurately implemented.

Teachers struggle daily with interruptions during classroom instruction. A teacher’s conditional knowledge, the ability to know when and why to use declarative and procedural knowledge, is tested during classroom disruptions. Kate had many instances over the course of the unit in which she easily accessed her conditional knowledge, specifically being able to motivate herself to refocus and to teach when needed. As this unit occurred in February/March, many students were ill with the flu. Observations were made of students becoming ill during instruction, students inadvertently brought bed bugs to class in backpacks, and class time was interrupted with phone calls and opportunities for students to prepare for a school-wide play. Throughout the unit, Kate handled each of these disturbances with grace and discretion. When

questioned, she admitted that she was dismayed at all of the interruptions while being videotaped, but she knew it was part of teaching and had to “jump back in” and complete each lesson.

Metacognitive regulation involves one’s knowledge about self-regulation of one’s thinking and learning. Paris and Lindauer (1982) proposed that regulation of metacognition consists of planning, monitoring, and evaluating. They also agreed that monitoring includes the analysis of the effectiveness of the strategies or plan being implemented. While patterns in observations, journals, and interviews provided insight into the fact that metacognitive regulation was Kate’s weakest area of metacognitive awareness, she demonstrated this awareness during instruction and reflection. This was particularly true in the area of metacognitive monitoring in regard to student comprehension. Throughout the study Kate expressed a love of teaching reading and a deep love for her students. This was evident in her reflections that focused on student behavior and reactions to lesson activities. Kate’s love of students motivated her to provide them with ample opportunities throughout the unit to meet in small groups to discuss their thinking, ideas, and questions about pre-determined topics. Researchers have found that “high-achieving classrooms spent significant amounts of time engaged in discussions about their reading and learning” (Harvey & Goudvis, 2007, p. 53). Kate learned through professional development opportunities and observations of other teachers that discussion is an effective classroom instructional strategy. She spent much of her time during discussion monitoring student behavior and scribing for students. Data collected over a period of two weeks revealed that students spent approximately 33% of their reading instruction in either small group or large group discussion. Kate regulated

this thinking during instruction, as she noted during reflections that the discussions often were very purposeful and students were effectively engaged; students were off task or generally chatty on other days. This metacognitive monitoring and evaluation provided Kate with awareness of the effectiveness of discussion during instruction.

Comprehension strategy instruction is an essential part of reading curriculum. The National Reading Panel (2000) concluded that comprehension monitoring can be taught and can in turn increase student comprehension. Most comprehension strategy instruction observed in classrooms is implicit in nature. This is the perceived outcome in Kate's classroom. While Kate admitted she does not explicitly teach comprehension strategies in a unit, she divulged that she tries to embed them when possible. During observation of teaching she demonstrated use of comprehension strategies that she employed when reading aloud to students. However, metacognitive regulation, or awareness during instruction, was less obvious. Each instructional sequence Kate implemented during this unit included some form of comprehension strategy, whether or not intentional. During day one instruction, Kate used photographs, reflective writing, and other informational sources to build background knowledge and to activate students' prior knowledge. She asked them throughout the unit to compare themselves to Little Willie, making connections between the text and their lives. During day two Kate asked students to create a summary of the chapter read that day, an effective after-reading strategy. Day three included a reflective writing piece during a Think-Pair-Share activity, in which students reflected on an idea and wrote about their thinking, paired with a partner, and shared their ideas to extend their thinking. She prompted them by saying "I want you to think about what stories you have read. Think about things you, yourself, have

experienced.” When questioned, Kate admitted she does this instinctually and does not specifically think about comprehension strategies; she said she simply knew they were good practice. On day four Kate provided students with a model of her thinking while reading. On three occasions Kate misread the text and stopped, apologized to students, and re-read the passage, correcting broken comprehension. Kate also provided students with several opportunities to visualize that which they read or thought, sometimes modeling her own. While Kate used a variety of comprehension strategies when she read aloud or offered instruction, she named only one particular strategy during a situation. This implicit teaching provides evidence of metacognitive use, but does not provide struggling or average readers with deliberate instruction on using strategies in their reading. Kate modeled numerous effective reading practices during instruction.

According to Harvey and Goudvis (2007), illustrating one’s thinking to students and modeling those mental processes utilized when reading give students an awareness of that which thoughtful readers do. Making one’s thinking visible to students by explicitly teaching these comprehension strategies and demonstrating them in large, small, or independent instruction, provides students with a framework in which to create their own schema for effective comprehension strategy for use during reading. If Kate had named each strategy she used and deliberately pointed out her tactics as a thoughtful reader, students would have been able to see and understand the specifics of a thoughtful reader, particularly struggling learners who fail to easily infer meaning from a lesson. Keene and Zimmerman (2007) supported research indicating that students provided with explicit models of metacognitive comprehension instruction benefit significantly from thoughtful and deliberate reading experiences. Pressley (2002) cited several studies that indicated

students, particularly struggling readers, benefit from deliberate comprehension instruction. Durkin (1993) noted that the main benefit of class discussion is the importance of explaining and showing students the relationship between instruction and the utilization of the information they learn during independent reading. “Children should realize that all practice is a means to an end” (p. 174).

Research has stated that comprehension is metacognitive and teachers must be aware of metacognitive knowledge and regulation, as well as assume the responsibility of adapting instruction without pause (Israel et al., 2005). During this literacy unit Kate was able to plan and to carry out instruction that demonstrated her metacognitive awareness of teaching. She established a pattern of strategy and technique that exhibited her awareness of several effective teacher practices.

Missed Opportunities

Metacognitive knowledge focuses on information an individual references when thinking about a particular cognition, including information about the task at hand, one’s ability to perform that task, and the ability to monitor and control the information (Hacker, Dunlosky, & Graesser, 2009). At the heart of metacognition is the ability to identify strengths and weaknesses while teaching. Teachers are asked to reflect on teaching and learning, but are not necessarily provided with professional development opportunities or follow-up activities to make reflection more effective. Regulation of metacognition provides teachers with the ability to assess and to analyze metacognitive strategies during instruction.

During the initial interview Kate admitted that she would like to believe she has complete knowledge about teaching; however, she stated, “There are times when

different things are needed to be a good teacher.” She also shared that there are many factors that determine the effectiveness of a teacher and that student reception and participation often prompts effectiveness. During planning and instruction Kate ranked her metacognitive knowledge and regulation high; when observed, she missed several opportunities to demonstrate that metacognitive awareness.

While Kate demonstrated that she possesses metacognitive knowledge, opportunities were missed due to poor planning, time management, lack of authentic reading experiences for students, comprehension assessment rather than instruction, and ineffective reflection processes. During planning, instruction and reflection of this unit, Kate did not explicitly plan; discuss; reflect on; or tie strategy use, instructional techniques, or assessment to her identified Common Core goal. Rather, she discussed and demonstrated that she bases much of her planning, teaching, and reflection on student attitudes, actions, and feelings. Intentional goal setting, planning, and reflection are essential for purposeful, efficient, and effective instruction.

Data show that Kate struggled with purposeful planning of her instructional unit. While research has discussed the importance of flexible teaching styles to provide student with explicit examples and models during instruction, it also is essential for effective teachers to plan purposeful instruction. Ruppel et al. (2009) noted, “Teachers who specify specific reading goals and reading behaviors to be achieved before instruction and plan content that address those objectives often have students who achieve at a higher reading level than teachers who do not” (p. 129). They also argued that teachers who provide direct or explicit instruction for a task or strategy, but do not tie it to a benchmark or learning outcome, do not provide students with occasions to apply learning.

Planning is essential for quality strategy instruction. Teachers must be intentional about making the invisible processes of learning more visible for students (Gunning, 2005; Pressley, 2006). In order to accomplish this, teachers need to understand their own cognition and to create quality instruction to model those strategies to students (Wilson & Bai, 2010). When asked about using a variety of teaching techniques, Kate shared that she often uses the same materials or information gained from other teachers to supplement her curriculum. She admitted several times throughout the study that her actions at times are not intentional, a habit, or new information gleaned from colleagues or professional development opportunities. Kate also shared that she does not submit lesson plans to her building principal or district administration. She relies on a self-created pacing guide based on Common Core standards to guide her unit and lesson planning. She revealed that her personal lesson plans are written one to two days prior to the actual lesson and uses them as a flexible guide for teaching. While Kate provided written lesson plans during this unit, they were brief and often patterned from the previous day's plan, as detailed in Chapter IV.

When questioned during the planning phase of the unit, Kate stated that she intended to use RL 4.3 that describe in depth a character setting or event in the story, drawing on specific details from the text. Kate explained that she planned to focus on character analysis. She provided students with quotes, a character trait graphic organizer, plot summary chart, and several opportunities for discussion of character actions during the unit. Yet, she failed to explicitly set a purpose for before, during, or after reading during the unit. Students are not explicitly aware of the Common Core goal during the unit, a lesson, or an activity. Kate does not set goals or purposes for students during

reading instruction, which led to a lack of continuity and purpose between activities and lessons. Each lesson became a stand-alone unit, with comprehension questions and chapter read aloud being the only link from day to day. With a clear purpose and goal for each day and for the overall unit, Kate could have provided students with a cohesive and purposeful learning situation.

Data collected also indicated missed opportunities on Kate's part to revisit instructional strategies throughout the unit to expand student depth of knowledge. Keene (2002) shared insight into this particular aspect of effective teaching:

These teachers use learning tools such as two-column journals, Venn diagrams, sketches, charting, skits, book clubs and letters to the author not as an activity that children use to fill time but as a way to record their thinking and to make their thinking permanent. They reason that if a student can capture his or her thinking long enough to analyze how using a strategy such as inferring helped him or her deepen comprehension, the chances are good that the student will continue to use that strategy independently and in a wide variety of text. (p. 98)

While Kate attempted to use multiple pre-reading activities with students, it became evident that these strategies were included in the lesson because of those gleaned from other teachers or professional development opportunities, not fully understanding the purpose or research behind the strategy and resulting in less effectiveness. Kate's inability to connect each lesson throughout the literacy unit caused students to miss opportunities for synthesis.

Metacognitive regulation is essential for effective teaching. Schraw (1998) asserted that metacognitive regulation includes competent use of intentional resources,

proficient use of existing strategies, and greater awareness of incomplete comprehension. One of the CCSS literacy goals is to employ well-prepared and supported teachers at all levels who have a deep understanding and knowledge of the latest research and processes needed to teach reading and writing in all content areas. Due to the lack of decisive planning and underlying knowledge of the purpose and effectiveness of best-practice instructional strategies, Kate struggled with tying her instructional strategies/activities to an actual Common Core goal.

Time management also was an issue during the course of this study. Kate shared: “I like to be more fluid and allow time for extra instruction, etc. So, I hate to have a rigid schedule. It is very frustrating.” She also admitted that pacing is her greatest weakness, citing that she desired all students to master the material presented before moving forward. She affirmed when students demonstrate enthusiasm for a topic, she tends to focus on that topic to maintain high interest. Kate disclosed in her initial interview and subsequent discussions that her lesson planning is fluid. When probed, she shared that students’ moods, attitudes, and motivation, as well as the topics to be covered, determine the pace of the unit/lesson. Several missed opportunities were observed during instruction due to Kate’s struggle with time management.

Kate cited time as a major deterrent for quality, detailed lesson planning. She shared that she has limited time to purposefully plan lessons or to reflect on them. She indicated that she possesses a variety of quality instructional strategies and tends to spend minimal time reflection. This is a missed opportunity for authentic teacher growth, as daily events and student challenges are forgotten when reflection is left for the end of a two-week unit. Kate demonstrated a love for students and reading, as well as a desire to

do well. However, she remarked on several occasions that teaching is very stressful, time consuming, and fast paced. The collection of data shows that she spends a great deal of instructional time responding to student comments or ideas she identifies as important during the lesson. Her aspiration to effectively teach often is overshadowed by her desire to meet all students' needs at all times.

Kate commented many times that she was preparing students for the state assessment and was continually behind the point of pacing at which she should be. These data indicated that Kate bases her approach to instruction on the ideas and precepts given to her by her superiors. Kate defaults to instruction that has been successful for her or her colleagues in the past. If she searched outside her circle of influence, she may find multiple best practice strategies that would benefit her students, help them to be self-motivated and increase teacher effectiveness with less effort on her part and significantly decreasing time management issues and the missed opportunities that resulted.

Data analysis clearly indicated that students are not asked to read aloud independently, together, or in small groups. This missed opportunity provided insight that Kate lacks essential knowledge about teaching, learning, and the importance of providing students with authentic reading experiences. Kate read each chapter to students, provided an activity to be completed together, and asked a variety of comprehension questions for assessment. Kate believes she is teaching students to the best of her ability with best practice strategy instruction. However, by analyzing her unit as a whole, patterns emerged that signified she lacks knowledge of the gradual release of responsibility and student independent practice of necessary skills.

No set purpose, clear direction, or viable outcomes were noted; however, students completed the reading of a chapter book and could answer questions on an assessment after much review. Kate does not provide students with time to read aloud or independently, and she does not provide instruction and reflection on their own learning. These patterns demonstrated Kate's need to control the classroom environment to "ensure" all students read and understand what was read, through her reading aloud. The patterns of data also signified that Kate does not fully understand or know the way in which to implement student driven instructional practices. Kate relies on teacher centered instruction and comprehension questions as assessments, forgetting or ignoring reflection as a process to drive new teaching and learning.

Kate described a typical day of classroom literacy instruction. The day begins with a review of the skill that is being covering. She then read the selected passage to "pull apart what the passage was talking about." Finally, she divulged that they complete a comprehension activity to "ensure students have successfully participated in the lesson." Due to her lack of reflective metacognitive awareness or in-depth planning, Kate spends most of each day's lesson providing students with "post reading activities." This revelation reiterated Kate's belief that she must be in charge of and responsible for student learning at all times. It also revealed she believes she is providing students with quality content and assessments because students were compliant. Students sat quietly, looking at their book, although it did not indicate a deep processing or integral understanding of content.

During observations, it was evident students were compliant; they sat in their seats and appeared to be reading. Only a few repeatedly volunteered answers or

comments on the reading as the unit progressed. It was unclear during observations whether the students truly understand the content or follow the rules of the classroom. Research has suggested that, in order to facilitate comprehension, teachers must effectively teach new vocabulary, provide essential background knowledge, and establish purposes for reading prior to doing so. Teachers should provide opportunities for students to visualize information they have read, to make connections to themselves, to other texts and the world, to make inferences, to summarize what they have read, and to repair broken comprehension. Research has suggested that opportunities should be provided for students after reading is completed for summarizing, analyzing, evaluating and reflecting the information they read (Durkin, 1993; Harvey & Goudvis, 2007). When students are not provided with authentic guided or independent reading time, they are unable to utilize metacognitive comprehension instruction.

Several opportunities for explicit comprehension instruction also were missed during the unit. Kate provided students with one day of pre-reading activities prior to reading the text. She worked with students to activate prior knowledge and to create questions that could lead discussion during subsequent lessons. Students worked in small groups and shared ideas about that which they read and assimilating the new information. Kate provided students with background knowledge utilizing a PowerPoint presentation to increase their understanding of the setting of the story using information to understand the era and living conditions of the characters.

Kate was excited to share information with the students but saved the “revealing” of the book until background knowledge was shared and discussed. No new vocabulary was discussed or studied during the pre-reading activities, and the only goal for reading

was set during the reading when Kate asked students to “put themselves in little Willy’s shoes.” She asked them throughout the reading whether they would be able to do the things that little Willy did to survive. While this strategy was effective in enabling students to make connections to themselves, an explicit or deliberate purpose for reading was not stated.

During data collection it was difficult to discern whether Kate possessed any actual working knowledge of her students’ abilities as readers and learners. Students did not read aloud or to themselves, very few answered questions and, when asked, Kate replied that she was very pleasantly surprised at the degree to which students answered the comprehension questions. It was evident that Kate believes compliance equals understanding and that lessons are for the sole purpose of teacher led instruction and student assessment. It was unclear during the observations and interviews whether Kate believes her students can learn on their own.

Kate began each lesson asking students to review the prior chapter. This pre-reading activity was approximately two to three minutes in length each day and concluded when Kate began to read aloud from the text. Chapter titles and predictions rarely were addressed, and students were not asked to set purposes for reading or to preview the chapter. These missed opportunities left students with many questions and curiosity that led to distractions and to stressful situations for the teacher as the story progressed. Several times during the reading Kate pleaded with students regarding the pitfalls of reading ahead and “spoiling” the ending for others. If Kate had established effective pre-reading strategies and had set purposes for reading or asked students to read in literacy circles, these issues may have been resolved. When asked about using literacy

circles, Kate explained that she had heard about them and would like to use them and reading response journals, but she wants to learn more about each to successfully implement them in her classroom. During observation and interviews it was apparent that Kate lacks knowledge of planning and reflection. She stated many times that her focus is on time constraints, student achievement, and moving through the unit in an appropriate manner. Kate made several comments about areas of weakness such as pacing, planning, and reflection. She focuses on information she deems important to her administrators and team teachers and believes that planning and reflection are nonessential because her superiors do not require them. This lack of urgency on the part of her administration influences Kate's metacognition, as she deems planning and reflection less important than scores and student achievement on standardized tests.

During reading, instruction followed the same pattern. Kate reads aloud to students each day to "ensure everyone heard and understood the story." She seldom pauses to discuss a vocabulary word or an idea or phrase that she thinks the students may not understand. When asked, she said she stops whenever she feels students need further explanation or encounters an idea to share with them. She admitted that she has read the story with previous classes but does not pre-read the chapter and plan any topics, words, or ideas to purposefully discuss with students. Although Kate described a typical lesson including pauses during reading to dissect or discuss the selection, many days passed during the unit when Kate did not stop to discuss events in the story or to use comprehension strategies. Chapter reading, including any discussion, typically lasted from 8 to 16 minutes.

These missed opportunities of questioning, modeling thinking, or discussion could have provided students with deliberate instruction on the use of their personal metacognitive comprehension strategies and moved them toward independent use of said strategies when reading. Yet, Kate explained that time was a factor during reading to the extent that often she moved quickly to allow time for comprehension assessment activities that followed the reading. As with the initial interview, it was evident that Kate possesses metacognitive knowledge above metacognitive regulation. The data also revealed that she lacks the ability to utilize her knowledge in effective planning, instruction and reflection. Professional educators should possess a deep knowledge of content, effective teaching processes, and insight into student and self-regulation. Kate explained that she does not have a working awareness of metacognition as a topic of study but demonstrates knowledge of teaching practices necessary for a professional educator. She also admitted weakness in the areas of planning and reflection.

As the unit continued, Kate provided students with several “activities” but did not offer time during the unit to revisit these activities to increase understanding. She introduced a graphic organizer that she labeled “prediction/summary sheet.” When she discussed this sheet with students, she said, “I have put a paper on your desk.” She did not title the paper or discuss its purpose for pre/post reading comprehension. Students completed the sheet because the teacher instructed them to do so, not because they understood its role in their comprehension of the text. Kate planned to use this sheet throughout the unit, yet on days three and four she changed the name of the graphic organizer to a visualization summary sheet. On day five the sheet had become an activity students completed while Kate prepared a drawing on the board for the next part of the

lesson. The summary was not discussed in small or whole group. As soon as students completed their drawing/writing for chapter four, they turned in their sheet and waited for directions for the next activity. During the next day's lesson Kate removed this activity from the plans. When questioned, she stated that she believed the "strategy" was confusing for students and interrupted the flow of the lesson; thus, she removed it entirely. As Kate did not understand the purpose and research on the graphic organizer, she was unable to use it effectively during classroom instruction. This missed opportunity sheds light on a recurring problem: teachers are "given" many strategies to use in the classroom but lack the background knowledge to effectively implement them during lessons.

Upon conclusion of each read aloud, Kate provided students with a comprehension assessment activity that varied from day to day. Durkin's (1978-1979) landmark study suggested that mentioning comprehension strategies during reading supplants actual comprehension instruction in grades 3 through 6. While 40 years of research has evolved subsequent to the study, research has proposed that the idea holds true in today's literacy classroom. Kate at no time during the unit deliberately includes comprehension instruction in her lessons. When asked, she commented that she never plans a comprehension unit; she adds ideas as appropriate throughout the year. She also admitted that she uses comprehension activities post reading most often for assessment of students' understanding to plan for the next day. It was evident in the lessons and in Kate's reflections that the lack of comprehension instruction hindered student behavior and their ability to think metacognitively.

At the end of each lesson Kate provided students with 10 comprehension questions purchased from a teaching website and asked them to select five of the 10 questions to answer. At the end of each class period student answers were collected; Kate admitted that she read and responded to each student's writing and used it primarily as a form of comprehension assessment. She returned the papers to students at another time during the school day in order to save time. When asked whether students chose recall questions rather than higher order thinking questions, she had not considered the possibility. Upon reflection, she noted that "many" students chose a variety of questions.

During the next day's lesson Kate made a point to ask students to choose a variety of questions, rather than the easiest to answer. This was another missed opportunity in which the questions and answers could have been used prior to reading to set a purpose, during reading to guide discussion and to increase student understanding, or after the lesson to guide student discussion during small group activities.

Kate's teaching style is representative of a traditional teacher. She uses strategies she has tested, relies heavily on those strategies, and leaves little room for student exploration, even during small group discussion. Observations illustrate that she believes her job as an educator is to guide students' learning by giving them systematic instructions for each activity and critical thinking task. Teachers such as Kate often teach as they were taught and lack the necessary knowledge of pedagogy to prepare students to be self-motivated learners.

Kate identified metacognitive regulation as one of her weakest areas of awareness, particularly self-reflection. She indicated her realization that reflection is important, but often did not make it a priority. While examining questions related to

evaluation, Kate shared that she feels her abilities are competent, but she at times fails to self-reflect due to time constraints and the changing demands of teaching. As Kate shared multiple times during her interview, she feels that self-reflection is her weakest area, along with pacing, but this is not her lowest score on the metacognitive survey. During daily reflection her self-assessments are brief and usually focus on student behavior or reactions to the lesson. During her first day of instruction she realized she had spent most of the lesson managing student behavior rather than moving them to think critically about the topic. She also reflected that she is not in the habit of completing reflection during the unit but rather thinks about the unit as a whole upon completion. This correlated with her self-ratings on the MAIT survey and also showed remarkable similarities to her daily teaching style; i.e., she spends most of her instructional time on student assessments rather than reflection and analysis of the text. In the second lesson she realized that students were more engaged in reading the chapter than in the discussion process. She expressed her desire to modify the lesson in order to engage, motivate, and focus students on the discussion and admitted she has other strategies to assist in this change. This was evident in the lesson; she saw the need but was ill equipped to modify instructional strategies. Statements during reflection were superficial: “I am extremely pleased with this particular unit and students seem to enjoy it as well.” “I cannot think of any way I would really want to change the lesson. It actually went better than I hoped! It was exciting!”

During reflection Kate made many statements about students’ enjoyment and whether she believed the lesson was successful or ineffective. Yet, she spent little time thinking about the effect of the instructional sequence or her practices on the

effectiveness of the lesson. She also spent minimal time thinking about her personal thinking, strategies, and processes during the lesson and did not ask “what if?”

According to the Kentucky Department of Education Framework for Teaching:

Reflect with accuracy, specificity and the ability to use what is learned in future teaching is a learned skill; mentors, coaches and supervisors can help teachers acquire and develop the skill of reflecting on teaching through supportive and deep questioning. Over time, this way of thinking and analyzing instruction through the lens of student learning becomes a habit of the mind, leading to improved teaching and learning. (Danielson, 2014, p. 37)

Kate stated throughout her reflections that she felt students were not prepared for the in-depth thinking needed for the activities planned or they were “excessively chatty,” which occurred during times of excitement during the reading or small group discussion. This could have been curtailed by providing instructional strategies that allowed them to share their thoughts and feelings in small groups or in writing. Interactive activities, such as literature circles or reflective journals, would have alleviated the behaviors that Kate felt were negative during daily instruction.

During this reflective process, Kate could have spent time considering her instructional techniques and their effectiveness for creating independent, metacognitive thinkers. Patterns that emerged during data collection revealed the need for Kate to spend additional time on pre-reading and during-reading strategy instruction. Goals and purposes for reading were not established during the 12-day unit, and she spent much of her time scaffolding students thinking processes during post-reading activities. Miller (2013) asserted: “Be precise when you share your thinking. Say what you need to say as

clearly and concisely as you can, then move on. Use real language and standard terminology when talking with children; nothing says inferring quite like inferring” (p. 73). Chapter IV provided many examples of Kate’s desire for students to understand, but she continually provided an excess of questions, restatements, and over-explanations. Kate’s reflection provided minimal insight into her metacognitive awareness or her ability to identify problems with instruction.

These data provided insight into the lack of intentional, insightful planning and missed opportunities to provide students with purposeful instruction. It was evident that Kate does not believe planning or reflection are important components of effective instruction. Kate firmly believes that, if an individual with higher credentials provides her with strategies and processes, they must be valuable and effective. Kate does not consider the complexities of teaching multiple perspectives of complicated content when creating lesson plans. She uses approaches from her repertoire of instructional strategies and moves forward using or eliminating only strategies she has acquired from others.

Limitations

While this study provides a snapshot into the daily instruction of an upper elementary reading classroom, limitations are discussed in the following sections.

Generalizability

According to Slavin (2007), generalizability is an issue in case studies, as with most qualitative research. As a case study I observed only one teacher during literacy instruction in a proficient Kentucky elementary school. The district I selected was located in a rural area of Kentucky and had a small number of students, limiting the classroom literacy teachers in grades 3 through 5. I worked with one fourth-grade elementary

teacher selected from a pool of four literacy teachers who were qualified to participate based on their descriptors. The building principal, who identified qualified individuals, recommended teacher participation in the study. Due to the small sample size, I recognize that the findings from this study cannot be broadly applied to all upper elementary reading teachers. However, because of the small sample size, I was able to collect rich, descriptive data, which would not have been possible with a larger sample. Therefore, I anticipate these results will add to the limited knowledge base on metacognitive awareness in teacher instruction.

Methods

The teacher in this study scheduled observations to fit reading instruction time; the observations were not random, which may have affected the teacher's planning and implementation of instructional strategies each day. While a 12-day unit conducted this late in the school year gave the study a glimpse into this teacher's daily reading instruction, the short period of time spent in the classroom represented only a small portion of the entire reading curriculum. Due to time constraints, the observation period was limited. However, as a reading teacher, I was able to observe a typical unit and the structured nature of the classroom setting. Clarifying questions were asked to obtain a complete picture of this literacy classroom in the time allotted. However, only two days of on-site instruction were observed. No opportunities other than email were available to view the videotaped lessons with the teacher or to ask her to explain her thinking or reason for choices made during instruction. By extending the data collection, insight into her decision-making process and understanding her instructional choices during analysis of the study could have been further developed.

Triangulation was achieved using multiple data sources to check for consistency in planning, observations, and teacher reflections. I also enlisted the assistance of a literacy specialist to blind code two observation samples to ensure accuracy of the coding process. Five of six coding instances were a match in the coding sample.

Researcher Bias

The results and conclusions of this study are based on my observations as a literacy specialist. Currently I am the only third-grade literacy teacher in my district. I have obtained a Master's Degree in Literacy and National Board Certification in Literacy. I am an adjunct professor at a local university, educating pre-service teachers in reading instruction. I am aware of the expectations and demands placed on teachers in today's classrooms. I am well versed in state Common Core standards and am aware of practices that should occur in literacy classrooms. However, I also am a resource teacher and national board certification mentor, possessing extensive experience with observational note taking and teacher observations as well as analytical reflection. I used this experience to reduce researcher bias as much as possible. According to Merriam (1988), "Qualitative case studies are limited, too, by the sensitivity and integrity of the investigator" (p. 42). The author must be aware of biases that can affect the final product. In qualitative research, all data are filtered through the researcher's worldview, values, and perspective. As reality is not an objective actuality, the researcher must be vigilant in maintaining an awareness of personal, professional, and observational bias.

Implications

Despite 40 years of research on metacognition and comprehension instruction, concern continues regarding teachers' lack of the basic understanding of metacognitive

processes. Teachers may be cognizant of the value of comprehension strategy instruction, but they continue to lack metacognitive awareness necessary for sharing such ideas with students (Block & Pressley, 2002). Educators continue to struggle with their own understanding of critical components of reading comprehension instruction (Pressley, 2006). Findings in this study indicate that educators may be unaware of their lack of metacognitive knowledge, regulation, and comprehension strategies when they read, much less when they provide instruction for students. Personal beliefs and limited teacher knowledge prevent educators from providing students with tools to foster their own automaticity and proficiency in reading. As a novice teacher, I did not understand that I lacked basic metacognitive awareness as a reader, critical thinker, and educator (Keene & Zimmerman, 2007) until reading *Mosaic of Thought*. This is a challenge faced by many instructors today without their knowledge.

This study uncovered a major flaw within the current educational system. When asked to provide a list of highly qualified literacy teachers, the principal submitted the names of each upper elementary reading teacher in his building, as all are highly qualified according to the state of Kentucky. As defined by the Kentucky Department of Education website, highly qualified teachers must have: (a) a bachelor's degree; (b) full state certification or licensure; and (c) prove that they know each subject they teach. The teacher selected for this study holds a master's degree, was teaching in the area in which she obtained her bachelor's degree, and had been teaching for nine years. She had received proficient marks on her evaluations and was presented for this study as knowledgeable in her field. However, during data collection, no opportunities occurred for students to read, to receive metacognitive strategy instruction, and for authentic

learning tasks. The teacher firmly believed she was providing students with materials, opportunities, and instruction to increase their reading proficiency. While this study was underway, no red flags were noted in regard to this teacher's ineffectiveness in the classroom. According to the Kentucky Department of Education, she met all criteria for a highly qualified reading teacher. This standards-based educational system creates teachers who believe they are providing students with sound instruction.

Due to standards-based policy, the education system is perpetuating a belief that, if standards are covered across content areas, teachers as educators are providing students with quality instruction. This idea has continued into higher learning. Education preparation classes also are created around a standards-based framework. Therefore, pre-service teachers are prepared to teach to professional standards that frequently decrease their focus on teaching critical thinking skills and providing authentic learning experiences for students in the classroom. A paradigm shift is needed in education policy in order to prepare teachers to provide effective strategy instruction and to improve a standards-based educational system.

During the course of this study, only one survey was uncovered to specifically measure a teacher's metacognitive awareness. That survey was limited to strategy and instructional practices, not explicitly uncovering awareness but rather strategy use. It was evident that the subject utilized metacognitive strategies in daily teaching, yet often she was unaware of how, when, or why she used these strategies. Therefore, teachers are aware of strategies that are labeled as metacognitive by researchers, but they are unaware of the study and practice of metacognition and its function in education. Instruments

should be created to specifically target a teacher's metacognitive awareness, rather than awareness of best practice instructional processes.

The difficulty with observation instruments often involves a disconnect between teacher pedagogy and actual classroom practice. This study found that the subject was able to articulate a purpose for each activity but could not specifically tie each strategy to current research or give a rationale for the effective use of each. Implementation of effective strategy instruction was lacking, as no set purpose or goal was evident to focus each activity. The subject's lack of formal metacognitive awareness created a disconnect between that which she knew and the information presented to students. The subject rarely shared her personal thinking and spent minimal time discussing purposes for strategies, activities, or assessments. Pressley (2006) stated that exemplary teachers not only plan instruction well, but also capitalize on teachable moments by providing appropriate mini-lessons in response to student needs. While an awareness of quality strategy instruction was evident, no foundational knowledge was seen regarding modeling strategies for students during instruction.

It is essential that pre-service teacher education, continuing teacher education, and professional development programs prepare teachers to incorporate metacognitive knowledge, regulation, and strategy instruction into predictable daily, weekly, and monthly literacy instruction. An instructional process infuses a set of concrete goals with a predictable schedule to ensure those goals are met. This instructional process provides students with a metacognitive awareness that enables them to apply comprehension skills and strategies when reading independently. It is extremely important that pre-service and novice teachers be afforded opportunities to acknowledge and to develop self-awareness

of metacognitive knowledge and regulation, along with specific comprehension strategies to increase use before, during, and after instruction.

High quality research exists on metacognition and explicit comprehension strategy instruction. “Most comprehension instruction techniques recommended for use in schools today are characterized as metacognitive” (Block & Pressley, 2002, p. 82). Once school systems recognize the need for metacognitive teachers, a decrease will occur in educators who do not possess metacognitive awareness and best practice pedagogy. The creation of opportunities for quality professional development is necessary for change in the educational system. Metacognitive awareness professional development opportunities, observation of mentor teachers who utilize metacognitive processes, and collaborative opportunities for teachers to share and reflect on teaching and learning in meaningful ways would increase teacher metacognitive awareness and direct quality strategy instruction.

The current teacher accountability system in Kentucky asks teachers to “reflect” on teaching and student learning on each of multiple components, indicators, and performance level targets. When the new system was established, teachers in surrounding districts were asked by building or district supervisors to complete and to submit the reflection piece of the teacher effectiveness system. Minimal preparation was provided for teachers. The Kentucky Department of Education website referred to effective teachers as those who spend quality time analyzing students’ work/data, observations of instruction, assignments, and interactions with colleagues to reflect on and to improve teaching practices. Joseph (2010) reported that, “Most teachers have well-developed metacognitive skills because their roles require insightful, highly conscious cognitive

activity and practical intelligence” (p. 100). This awareness allows them to reflect on their work and to evaluate instructional goals, methods, and outcomes. However, the study asserted that many teachers lack the knowledge/skills necessary for deep reflection; the act of reflection itself becomes meaningless.

A shortage remains of professional development opportunities or preparation courses for teachers to increase their metacognitive awareness. Pre-service and in-service teachers would greatly benefit from instruction in this area of. Teachers currently are rated by systems that demand they plan, implement, and reflect on quality teaching. They are given written models of criteria for each exemplar. However, direct and deliberate teaching in professional development seminars or pre-service classes would provide them with a clear and concise process that links the requirements with an efficient and effective process to accomplish those tasks.

If the intent of metacognitive research is to provide the teaching community with effective strategies for comprehension instruction, the primary focus should be on developing metacognitive awareness in pre-service and in-service teachers. This study found that, while the subject utilized metacognitive strategies, she was unable to make a direct connection between metacognition and classroom instruction. No evidence existed related to pre-service preparation or professional development opportunities for her to increase her awareness. According to Duffy (2005), “Emerging ideas about teacher development are most often associated with in-service efforts rather than with pre-service teacher education” (p. 307). Three explanations are associated with this idea: (1) In-service teachers are perceived to have experience and independence while pre-service teachers are assumed to be immature teenagers who would be overwhelmed by

metacognitive theory; (2) University curriculum is dictated by course requirements and state certification, imposing limitations that constrain pre-service education; and (3) Universities tend to be removed from the realities of the classroom, resulting in difficulty to emulate actual classroom experiences, difficulties, and behaviors. Focused preparation for pre-service teachers in metacognitive comprehension strategy instruction would provide educators with a foundational awareness of metacognitive processes. If pre-service courses are based on explicit metacognitive practices, it is possible to create a paradigm shift to provide student-centered learning environments and direct strategic instruction.

However, many “regulated” aspects of curriculum and assessment exist that may be a source of educators’ struggles. Common Core, high stakes testing, curriculum mapping, pacing guides, regulated formative and summative assessments, and program reviews are only a few of the mandates implemented over the last three decades. In the early 1990s Kentucky passed a reform that required all students, regardless of ability, to reach proficiency by 2014. Teachers are required to break down and deeply understand complex Common Core standards, teach students the manner with which to utilize test-taking strategies to perform well on high stakes testing and to provide copious amounts of evidence that they meet federal and state standards. A shift has occurred in the educational system that moves teachers from “masters” of their classroom to political employees who check off boxes as they teach and provide proof each day that they meet a new or revisited federal or state mandate. Metacognitive thought becomes frivolous in an era in which teachers are provided with multi-layered guidelines for teaching. Teachers spend their time working to understand and to master Common Core standards,

teaching test-taking strategies and providing evidence of student learning. Often they are overwhelmed and underfunded and cannot assume new learning for learning sake.

Metacognitive awareness and comprehension strategy instruction should be the focus of school district professional development and pre-service education. Efforts should align with creating teachers who understand their personal metacognition and are able to purposely share that knowledge with students. Students will then become critical thinkers and problem solvers. This study supports the idea that metacognitive awareness, explicit comprehension strategy instruction, and teacher preparation should be at the forefront of educational reform.

Recommendations for Further Study

According to Duffy et al. (2009), qualitative and quantitative studies of teacher metacognition and its implementation during instruction are essential to advance knowledge in this field. Few studies on the metacognitive awareness level of teachers and the limited existing research are based on identifying groups of teachers and guiding them in awareness studies, measuring the effects on student achievement. To further this research, studies are needed that focus on ways to effectively measure metacognition during observations and ways to narrow the gap between teacher knowledge, perception, and classroom instruction. Joseph (2010) noted that, for many teachers, thinking about the mental processes necessary for their students to comprehend material is not automatic.

Further study is needed on the impact of state mandates on metacognition. Are preservice and in-service teachers who have metacognitive awareness more effective in creating metacognitively proficient students than those who follow prescriptive methods

of teaching? Educational practices should be examined and research conducted that provide comparative data between highly regulated teaching and student achievement versus minimally regulated teaching and learning.

Studies are necessary to provide a clear picture of the positive or negative effects of curriculum mapping, pacing guides, and standards-based instruction on teacher effectiveness. Research should investigate in depth those changes necessary to fix a broken educational system. When teachers can present themselves as highly qualified but lack the necessary knowledge to implement quality instruction, research should first consider problems with educational reform. Educational policy should provide teachers and students with authentic teaching and learning opportunities that create well-rounded, critical thinking, productive adults. An examination that provides a clear direction for empowering teachers and providing students with these experiences will benefit educational policy, teaching, and learning.

New research could investigate the influences of these regulations on a teacher's beliefs about teaching and learning over time. How do state mandates affect a teacher's intrinsic motivation to be a life-long learner? Does a teacher spend more time trying to understand policy and Common Core standards or learning new and effective strategies that will provide students with opportunities to be metacognitive? Keene (2002) reminded that many "teachers still define comprehension as the ability to answer questions about the text or to retell what has been read" (p. 101). As researchers and educators, we need to provide new and evolving research that begins to change the definition of comprehension into that of metacognition awareness and proficient strategy use. Teachers are unlikely to change their practices. Israel et al. (2005) stated, "Without

some exposure to what teaching actually looks like when it's being done differently and exposure to someone who could help them understand the difference between what they were doing and what they aspire to do" (p. 306). Metacognitive research exists, but limited data can be found on the effects of providing pre-service and in-service teachers with professional development opportunities to increase metacognitive awareness. What does the model for teaching and learning look like in a pre-service college setting? What does the model for teaching and learning look like during a professional development opportunity? Does a disconnect occur between the opportunities for learning provided for pre-service and in-service teachers and the expectations for these teachers during classroom instruction? Educational institutions and school districts should critically analyze systems currently in place for teacher preparation to determine whether they truly align with current research and teacher accountability systems.

Conclusion

Most teachers, by nature of the profession, possess a passion for their job and a propensity toward lifelong learning. They seek new and innovative ways to help students succeed, spend hours searching for effective curriculum, and spend time with colleagues sharing successful strategies. They desire new information that targets issues in literacy classrooms that are observed, but they have no tools to solve them. Block and Pressley (2006) asserted that metacognition is an established process in reading and learning. Therefore, if teachers are unaware of their metacognitive knowledge and regulation during reading planning, instruction, and reflection, it is vital that researchers discover the point at which the disconnect occurs.

It is imperative that teachers be provided with theory, research, and strategies to strengthen their metacognitive awareness to prepare students to use those skills when reading. Duffy, Parsons, and Meloth (2009) reported that researchers and proponents of metacognitive awareness spend a great deal of time promoting the idea but lack the necessary research to validate it and the energy that is vital for change in policy and classroom settings.

Pre-service and in-service research is needed to provide reliable and valid models to qualify or quantify metacognitive awareness. Adequate learning opportunities should be available to cultivate their metacognitive awareness in order to model those processes for creating successful readers. With educational reform focused on high-stakes testing, teachers require learning experiences, tools, and strategies that are effective and efficient in preparing students to be critical thinkers. Fortunately, metacognitive awareness and explicit modeling of these processes are low cost, yet effective strategies that can be learned and immediately implemented in classroom instruction.

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APPENDIX A: IRB Approval Letter



INSTITUTIONAL REVIEW BOARD
OFFICE OF RESEARCH INTEGRITY

DATE: January 25, 2016
TO: Jennifer Antoncetti-Neal
FROM: Western Kentucky University (WKU) IRB
PROJECT TITLE: [857874-1] THE RELATIONSHIP BETWEEN METACOGNITIVE STRATEGIES AND READING COMPREHENSION INSTRUCTION IN PROFICIENT ELEMENTARY SCHOOLS
REFERENCE #: IRB 16-291
SUBMISSION TYPE: New Project
ACTION: APPROVED
APPROVAL DATE: January 25, 2016
EXPIRATION DATE: December 1, 2016
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of December 1, 2016.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.

APPENDIX B: IRB Informed Consent Document

INFORMED CONSENT DOCUMENT

Project Title: Relationship Between Metacognitive Strategies and Reading Comprehension Instruction in Proficient Elementary Schools

Investigator: Jennifer Antoniotti-Neal, Educational Leadership Doctoral Program 270-459-0194

You are being asked to participate in a research project entitled “The Relationship Between Metacognitive Strategies and Reading Comprehension Instruction in Proficient Elementary Schools.” This project will serve as Jennifer Antoniotti-Neal’s dissertation for the requirements of the Educational Leadership Doctorate at Western Kentucky University. The University requires that you give your signed agreement to participate in this project. This consent document, and the researcher, will explain the purpose of this research project and will go over all of the time commitments, procedures used in this study, and the risks and benefits of participating in this research project. You may ask him any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

The purpose of this study is to examine teacher awareness of metacognition, authentic comprehension instruction and if/how that awareness translates to obvious classroom instruction. Teachers who provide instruction in literacy to students in third through fifth grade will be considered as potential candidates for this study. The study will be in the form of a case study and the participant will be asked to open his/her classroom to the researcher for a two-week period of literacy instruction.

The researcher conducting the study will visit the case study classroom during the initial and final days of the ten-day literacy unit. During the observation, the researcher will audiotape or videotape each session to collect information. The teacher will be asked to videotape literacy instruction for days two through nine and the researcher will collect and transcribe each tape. The researcher will focus on what the teacher says and does and students will not be included in this research project. The researcher will then record information from audio/video recordings and the tapes will be destroyed.

There are no anticipated risks or benefits known to the participants of this study. Names will not be recorded on any information collected by the researcher. Any information the researcher uses in the study about the school, teacher participant, school programs and

artifacts collected will not include any names and will be kept in a secure manner. If you decide to participate in this project, please sign on the participant signature line in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

Your participation is voluntary and you may discontinue at any time without penalty. Refusal to participate in this study will have no effect on any future services you may be entitled to from Western Kentucky University. Should you have any questions prior to or during this study, you may contact the primary investigator, Jennifer Antoniotti-Neal by email jennifer.flowers991@topper.wku.edu.

You understand also that it is not possible to identify all potential risks in and experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Signature of Participant

Date

Witness

Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD
Paul Mooney, Human Protections Administrator
TELEPHONE: (270) 745-2129

APPENDIX C: Email Request to Administrators

Date

Greetings,

My name is Jennifer Antoniotti-Neal, and I am an Educational Leadership doctoral student at Western Kentucky University (WKU). I am presently completing my dissertation focused on metacognitive awareness and implementation of comprehension strategy instruction in high performing elementary schools. I am soliciting your assistance with my dissertation research. I am requesting permission to conduct this research study at (insert name) Elementary School. If granted permission, I will contact the principal to request assistance with teacher participant selection.

I am in search of third through fifth grade literacy (reading) teachers who exhibit qualities of a highly effective teacher, as the administrators rank them using the Kentucky Framework for teaching. In addition, I will share results of the study after its completion. Participation in this research study will be on a voluntary basis for all participants. Information collected will be kept strictly confidential and anonymous by the researcher. Additionally, data for each participant will not include any identifying information such as names of teachers and/or principals. There will be no known risks associated with participation in this study.

You may email me at jennifer.neal2@cumberland.kyschools.us to grant permission to conduct this study in your district. If you have any questions, you may email me or contact me by phone (270) 450-0194. I am completing this dissertation under the direction of Dr. Sherry Powers, Dean, School of Education and Dr. Tony Norman, Director, Educational Leadership Doctoral Program. You may also contact Dr. Norman if needed at (270) 745-3061.

Sincerely,

Jennifer Antoniotti-Neal
WKU Ed.D Candidate

APPENDIX D: Email Request for Principal

Date

Dear Principal,

My name is Jennifer Antoniotti-Neal, and I am an Educational Leadership doctoral student at Western Kentucky University (WKU). I am presently completing my dissertation focused on metacognitive awareness and implementation of comprehension strategy instruction in high performing elementary schools. I am soliciting your assistance with my dissertation research. I have contacted your superintendent and am requesting permission to conduct this research study at (insert name) Elementary School.

I am in search of effective teachers for a qualitative study for my dissertation. I am hoping to spend two weeks observing in a highly qualified third, fourth or fifth grade teacher's literacy classroom. Teachers selected should exemplify the following criteria:

Implementation of metacognitive strategy instruction: specifically comprehension strategy instruction, pedagogy that validates, facilitates and empowers students to utilize metacognitive and comprehension strategies simultaneously. I am interested in observing in a teacher's classroom whose metacognitive processes are evident in their planning and instruction and who deliberately incorporates comprehension instruction to enable students to become independent and successful readers.

You may email me at jennifer.neal2@cumberland.kyschools.us to grant permission to conduct the study in your school and to recommend teacher candidates for participation. If you have any questions, you may email me or contact me by phone (270) 450-0194. I am completing this dissertation under the direction of Dr. Sherry Powers, Dean, School of Education and Dr. Tony Norman, Director, Educational Leadership Doctoral Program. You may also contact Dr. Norman if needed at (270) 745-3061.
Sincerely,

Sincerely,

Jennifer Antoniotti-Neal
WKU Ed.D Candidate

APPENDIX E: Teacher Pre-interview Email

Date

Dear Teacher,

My name is Jennifer Antoniotti-Neal, and I am an Educational Leadership doctoral student at Western Kentucky University (WKU). I am presently completing my dissertation focused on metacognitive awareness and implementation of comprehension strategy instruction in high performing elementary schools. I am soliciting your assistance with my dissertation research.

I am in search of third through fifth grade literacy (reading) teachers who exhibit qualities of a highly effective teacher, as the administrators rank them using the Kentucky Framework for teaching. Your principal/superintendent has identified you as a potential candidate for my research study.

If you decide to participate in the initial stages of the research process, I will contact you to set up an initial meeting where I will ask you to sign a consent form, explaining the study and your role. I will then briefly interview you and set up a 30-minute observation of your reading classroom. The interviews will be audiotaped to allow me to transcribe them at a later time. All answers will be kept confidential. One teacher will be selected from the pool of identified candidates to conduct further classroom research. In addition, I will share results of the study after its completion. Participation in this research study will be on a voluntary basis for all participants. Information collected will be kept strictly confidential and anonymous by the researcher. Additionally, data for each participant will not include any identifying information such as names of teachers and/or principals. There will be no known risks associated with participation in this study.

If you decide not to participate in this research study, you may email me at jennifer.neal2@cumberland.kyschools.us. If you have any questions, you may email me or contact me by phone (270) 450-0194.

Sincerely,

Jennifer Antoniotti-Neal
WKU Ed.D Candidate

APPENDIX F: Demographics Questionnaire

To assist with the study, this is a short questionnaire to gather demographic data prior to the interview. Please answer each question by placing an X in the box or filling in the appropriate information on the line.

Name: _____ Date: _____

Your School: _____

Years of teaching experience (including 2015-16 academic year): _____

Grade(s) taught in the 2015-16 academic year: _____

Previous grades/subjects taught: _____

Gender: Female Male

Age: _____

Marital Status: Married Single

Your educational attainment:

Bachelor's Degree; Field: _____/minor _____

Hours beyond Bachelor's; How many? _____

Master's Degree; Field _____

Hours beyond Master's; How many? _____

Doctoral Degree

Is there any other information you would like to share? _____

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

*Adapted from KRP Teacher Pre-Survey 2012-13

APPENDIX G: Metacognitive Awareness Inventory for Teachers

<p>The MAIT is a list of 24 statements. The purpose is to gain insight into teacher metacognitive awareness. There are no right or wrong answers in this list of statements. It is simply a matter of what is true for you. Read every statement carefully and choose the one that best describes you. Thank you very much for your participation.</p>
<p>1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree</p>
<p>1. I am aware of the strengths and weaknesses in my teaching. 1 2 3 4 5</p>
<p>2. I try to use teaching techniques that worked in the past. 1 2 3 4 5</p>
<p>3. I use my strengths to compensate for my weaknesses in my teaching. 1 2 3 4 5</p>
<p>4. I pace myself while I am teaching in order to have enough time. 1 2 3 4 5</p>
<p>5. I ask myself periodically if I meet my teaching goals while I am teaching. 1 2 3 4 5</p>
<p>6. I ask myself how well I have accomplished my teaching goals once I am finished. 1 2 3 4 5</p>
<p>7. I know what skills are most important in order to be a good teacher. 1 2 3 4 5</p>
<p>8. I have a specific reason for choosing each teaching technique I use in class. 1 2 3 4 5</p>
<p>9. I can motivate myself to teach when I really need to teach. 1 2 3 4 5</p>
<p>10. I set my specific teaching goals before I start teaching. 1 2 3 4 5</p>
<p>11. I find myself assessing how useful my teaching techniques are while I am teaching. 1 2 3 4 5</p>
<p>12. I ask myself if I could have used different techniques after each teaching experience. 1 2 3 4 5</p>
<p>13. I have control over how well I teach. 1 2 3 4 5</p>
<p>14. I am aware of what teaching techniques I use while I am teaching. 1 2 3 4 5</p>
<p>15. I use different teaching techniques depending on the situation. 1 2 3 4 5</p>
<p>16. I ask myself questions about the teaching materials I am going to use. 1 2 3 4 5</p>
<p>17. I check regularly to what extent my students comprehend the topic while I am teaching. 1 2 3 4 5</p>
<p>18. After teaching a point, I ask myself if I'd teach it more effectively next time. 1 2 3 4 5</p>
<p>19. I know what I am expected to teach. 1 2 3 4 5</p>
<p>20. I use helpful teaching techniques automatically. 1 2 3 4 5</p>
<p>21. I know when each teaching technique I use will be most effective. 1 2 3 4 5</p>
<p>22. I organize my time to best accomplish my teaching goals. 1 2 3 4 5</p>
<p>23. I ask myself questions about how well I am doing while I am teaching. 1 2 3 4 5</p>
<p>24. I ask myself if I have considered all possible techniques after teaching a point. 1 2 3 4 5</p>

APPENDIX H: Initial Teacher Interview Protocol

1. Describe your teaching philosophy? Specifically, what is your philosophy on literacy instruction?
2. Describe a typical day of literacy instruction in your classroom.
Asking probing questions as needed-such as: How do you provide for various reading abilities, How is literacy integrated into other subject areas?
3. Did you study any metacognitive strategies during undergraduate or graduate level work? If so, what do you know about your own metacognition? In relation to literacy? In relation to comprehension instruction?
4. How do you choose reading materials/writing topics or themes to cover in your unit? How do you tie these materials to comprehension strategy instruction?
5. How do you assess your students' comprehension?
6. How do you encourage students' independent use of reading strategies during self-regulating (free) reading time? Across subjects?

*adapted with permission from Angela Cox dissertation.

APPENDIX I: Kentucky Reading Project Research Field Observation Instrument

Page 1

**Kentucky Reading Project Research
Field Observation Instrument
2009-2010**

Date [Click here to enter a date.](#) Teacher _____ School _____
 Observer _____ Observation Number _____ Choose an item. _____
 Start Time _____ End Time _____ Number of Students _____ Grade Level _____

1	Beginning Time Interval:		Type Notes Below Starting at Numbered Line.
2	Beginning Time Interval:		Type Notes Below Starting at Numbered Line.
3	Beginning Time Interval:		Type Notes Below Starting at Numbered Line.
4	Beginning Time Interval:		Type Notes Below Starting at Numbered Line.
5	Beginning Time Interval:		Type Notes Below Starting at Numbered Line.