

Reading Comprehension Instruction for Ninth Graders with Learning Disabilities:

A Reality Check

BY

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THESIS

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This thesis is dedicated to my parents, Steven and Venke Ko, and to my husband and best friend, Juan Lira. Without your endless love and support, none of this would have been possible.

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SUMMARY

Reading comprehension is a significant concern for adolescents with learning disabilities (LD), particularly in secondary schools where content is taught primarily through textbooks (Scruggs, Mastropieri, & McDuffie, 2007). Many students with LD are inactive readers who lack the metacognitive skills that their proficient reading peers have (Gersten et al., 1998; Mastropieri, Scruggs, & Graetz, 2003). Research has shown that students with LD benefit from comprehension instruction that is direct, explicit, and strategic (Gajria, Jitendra, Sood, & Sacks, 2007; Gersten, Fuchs, Williams, & Baker, 2001; Roberts, Torgesen, Boardman, & Scammacca, 2008). Surprisingly little is known about reading instruction for students with LD in secondary classrooms. Thus, the purpose of this study was to examine the reading comprehension instruction in special education reading classrooms for ninth grade students with LD. Additionally, teacher interviews were conducted to better understand the factors that special educators identified as influencing their reading comprehension instructional decisions. Eight special education teachers representing six urban high schools were observed and interviewed three times over the course of the study. Data were analyzed using qualitative data analysis methods to code, categorize, and identify emergent themes related to reading comprehension instruction and the factors that influence instruction. Results from classroom observations indicated that special education teachers implemented a number of reading comprehension strategies, practices, and activities. The most frequently observed practices included student and teacher read aloud, questioning, independent seatwork, activating prior knowledge, and using graphic organizers. Explicit instruction in how and when to use reading comprehension strategies, however, was not observed. Additionally, findings from teacher interviews revealed

SUMMARY (continued)

that student, school, and personal factors influenced their instruction, including their students' abilities and needs, test preparation, and personal interests. Teacher responses conveyed a limited understanding of the components of reading comprehension instruction. This study contributes important descriptive information on the reality of reading comprehension instruction for students with LD in secondary schools. Moreover, it reveals the extent to which evidence-based reading comprehension practices are not making their way into secondary reading classrooms and offers insight into factors that teachers state as influencing their reading comprehension instruction for students with LD. Implications for future research and teacher preparation are discussed.

I. INTRODUCTION

Background

It is estimated that each day approximately 7,000 students drop out of school; many of these students attribute their lack of success to an inability to keep up with literacy demands (Alliance for Excellent Education, 2006). In fact, approximately eight million students between fourth and 12th grade struggle to read at grade level which significantly increases their chances of dropping out (Biancarosa & Snow, 2006). Additionally, over two thirds of secondary students score below the proficiency level in reading material essential for daily living (Perie, Grigg, & Donahue, 2005). As concerning as these figures are, the numbers are even more devastating for students identified with a learning disability (LD). Approximately 21% of students with LD read five or more grades below level (National Longitudinal Transition Study II, 2003). Consequently, the high school drop out rate for students with LD is estimated at 25% compared to 9% for students without disabilities (U.S. Department of Education, 2011). Moreover, only one in ten students with LD, compared to over half of the students in the general education population, attend a four-year postsecondary program within two years of leaving high school (National Longitudinal Study II, 2003).

These challenges are magnified in urban schools where education is heavily influenced by environmental factors such as increased size and bureaucracy and greater ethnic and socioeconomic heterogeneity (Chou & Tozer, 2008). In a typical urban school, a larger proportion of students come from low-income families and are of diverse cultural and linguistic backgrounds (Snow, 2002) and approximately half of all incoming ninth grade students read two or more years below grade level (Balfanz, McPartland & Shaw, 2002). Students who receive special education services are disproportionately low-income, African American, and male and

are more likely to receive free or reduced lunch than their general education peers (Gwynne, Lesnick, Hart, & Allensworth, 2009). In 2009, the dropout rate was 4.8% for Blacks and 5.8% for Hispanics, compared to 2.4% for Whites, and the dropout rate for students living in low-income families was five times greater than the rate of their peers from high-income families (7.4% compared to 1.4%) (Chapman, Laird, Ifill, & KewalRamani, 2011).

Reading difficulties and secondary school. Students with LD face an extraordinary set of challenges as they transition to secondary school where content is emphasized and adequate literacy skills are assumed (Snow, 2002). In content area classrooms, teachers expect students to learn the content primarily through reading textbooks. These widely used textbooks are said to lack “considerateness”, a term that refers to their overwhelming, unfriendly, unorganized, and confusing nature (Armbruster & Anderson, 1988). Over time, they have become thicker and more complex (Deshler, Schumaker, Bui, & Vernon, 2006) and are often written at readability levels at or above grade level (Mastropieri, Scruggs, & Graetz, 2003). These expectations exceed the skill level of a significant number of students with LD who have not mastered basic reading skills by the time they enter secondary school. In fact, many of these struggling secondary readers continue to experience difficulty with all aspects of reading, including decoding, fluency, vocabulary and comprehension (Archer, Gleason, & Vachon, 2003). Compounding the difficulties posed by textbooks, students with LD face other academic challenges, including taking notes from lectures, studying independently for hours per night, and mastering more than 60 facts per test (Putnam, Deshler, & Shumaker, 1992; Rademacher, Schumaker, & Deshler, 1996; Suritsky & Hughes, 1996). Additionally, students with LD experience the following: 1) higher rates of absenteeism, 2) lower grade point averages, 3) higher rates of course failure, 4) lower self-esteem, and 5) higher rates of inappropriate behavior

(Deshler & Schumaker, 2006). Collectively, these challenges begin to explain why, compared to the general population, a disproportionate number of students with LD drop out of high school.

Reading comprehension and students with LD. Nationally, students with LD comprise over 40% of all students receiving special education services (U.S. Department of Education, 2011). Approximately 80% of students with LD have difficulty with reading (Gersten, Fuchs, Williams, & Baker, 2001; Kavale & Reese, 1992). In particular, a significant number of adolescents with LD experience difficulty comprehending what they read. Difficulties in reading comprehension occur when there are problems in one or more of the following areas: a) decoding words, b) fluency, c) understanding the meanings of words, d) relating content to prior knowledge, e) applying comprehension strategies, and f) monitoring understanding (Edmonds et al., 2009). Research suggests that for students with LD, these difficulties may be due to deficiencies in several areas, including a) general background knowledge, b) knowledge of common text structures, such as narrative and expository texts, c) vocabulary knowledge, d) reading fluency, and e) task persistence (Gersten et al., 1998; Gersten et al., 2001). An alternative perspective, however, posits that the challenges that students with LD face in comprehending text are most accurately described by inefficiency rather than deficiency (Gersten et al., 2001). This means that although students with LD possess the required cognitive tools to effectively process information, they tend to do so very inefficiently. Many students with LD lack the information-processing skills required to comprehend complex text (Fisher, Schumaker, & Deshler, 2002). It is theorized that this breakdown occurs in the domain of strategic processing and metacognition (Gersten et al., 1998; Gersten et al., 2001; Mastropieri et al., 2003).

Reading comprehension requires the ability to decode words, read fluently, and use active strategies to understand the meaning of printed text (Palincsar & Brown, 1984). Successful readers monitor their comprehension while they read, allowing them to make connections to prior learning and activate fix-up strategies when their comprehension breaks down (Boardman et al., 2008). Students with LD, however, are believed to be inactive readers who lack the metacognitive skills that their proficient reading peers have (Gersten et al., 1998; Mastropieri et al., 2003). As a result, they may not realize that they should be actively monitoring their comprehension, how to recognize problem situations, or how and when to apply a strategy to assist in making meaning of what they read.

The relationship between reading comprehension and reading disability has been debated for over a century. Although this relationship continues to be debated, current research suggests that this relationship is more complex than previously thought (Frankel, Pearson & Nair, 2011). Several models have been proposed to fully explain the construct, including cognitive-processing models, socio-cognitive models, and transactional models. One model that has endured is Rumelhart's (1977) cognitive-based model, the interactive model of reading. In this model, the reader considers information from several sources simultaneously to construct meaning from the text. The significance of this model is that when information from one source is deficient, the reader relies on information from another, stronger source.

Years later, Lipson and Wixson (1986) extended this model to design the interactive model of reading disability. This model places reading comprehension at the intersection of text, the reader, and the context and argues that the reader is only temporarily affected by the disability, given a specific text, task, or situation. From this perspective, reading difficulties lie in the instructional context rather than within the reader, underscoring the role of the classroom

teacher. This model has been validated by others in the field who suggest that “the ability to comprehend written texts is not a static or fixed ability, but rather one involves a dynamic relationship between the demands of texts and the prior knowledge and goals of the reader” (Lee & Spratley, 2010, p. 3).

Perhaps the most well known cognitive-based reading theory, however, is the model of automatic information processing (LaBerge & Samuels, 1974). This model highlights the important role that internal elements of attention play in comprehension, which according to Samuels, “automaticity...simply means that information is processed with little attention” (1994, p. 823). Samuels proposed that there are three elements of internal attention: alertness, selectivity, and limited capacity. When the text is difficult, most of the attention is devoted to decoding. When decoding becomes automatic, more resources can be allocated to the process of comprehension. In this model, comprehension breaks down when the reader cannot quickly and automatically access the concepts stored in the schemata (units of knowledge). These models provide valuable insight into the reading process, where comprehension can break down for students with LD, and what strategies are most beneficial in improving this process.

Reading comprehension instruction. Over the past few decades, a significant number of studies, including literature reviews, research syntheses, and meta-analyses, designed to identify evidence-based practices in reading comprehension instruction for students with LD have been published (e.g., Berkeley, Scruggs, & Mastropieri, 2010; Gajria, Jitendra, Sood, & Sacks, 2007; Gersten et al., 1998; Gersten et al., 2001; Mastropieri & Scruggs, 1997; Sencibaugh, 2007; Swanson, 1999a; Swanson, 1999b; Swanson & Hoskyn, 1998; Talbott, Lloyd, & Tankersley, 1994; Vaughn, Gersten, & Chard, 2000). This body of work has significantly improved our understanding of the most effective instructional components, as well as the

training sequence, for teaching students with LD to comprehend what they read. In particular, we now know that that adolescence is not too late to intervene and that older, struggling readers, including those with LD, do benefit from interventions (Scammacca et al., 2007).

A closer review of this research suggests that reading comprehension instruction is very effective in improving students' understanding of text. For expository text, some of the highest effect sizes have been found for content enhancements and structured cognitive strategies (Gajria et al., 2007). Content enhancements refer to different instructional tools that enrich students' comprehension and retention of content area information (Lenz, Bulgren, & Hudson, 1990). They enable teachers to compensate for the information-processing challenges experienced by students with LD. Some of the most effective content enhancements on content area comprehension have been graphic organizers or semantic feature analyses and mnemonic illustrations (Gajria et al., 2007). Cognitive strategies have also been very effective for improving reading comprehension for students with LD. A cognitive strategy is a "mental routine or procedure for accomplishing a cognitive goal" (Dole, Nokes, & Drits, 2008, p. 347). Cognitive strategy instruction emphasizes teaching students how to learn rather than mastering content (Gajria et al., 2007). Although several single strategies, such as identifying main ideas or developing main idea sentences through paraphrasing or summarizing, have had positive outcomes (mean $ES = 2.56$, $SD = 1.09$, $n = 6$), larger effect sizes have been associated with instruction involving multiple strategies (Gajria et al., 2007).

Over a decade ago, the National Reading Panel (NRP) (2000) had similar findings, concluding that text comprehension instruction "can be improved by teaching students to use specific cognitive strategies or to reason strategically when they encounter barriers to comprehension when reading" (p. 4-39). The NRP defined a strategy as "a particular procedure

that guides students to become aware of how well they are comprehending as they attempt to read or write” (p. 4-42). Strategy instruction is believed to enhance the critical thinking skills of students with LD and increase their active participation in the process (Sencibaugh, 2010).

Because students with LD are generally recognized as inefficient readers who lack the metacognitive skills or process of “thinking about thinking” necessary to comprehend text, much of the research for this population has focused on strategy instruction, suggesting that comprehension improves when students are taught to “attend more carefully” or “think more systematically” about the text while reading (Berkeley et al., 2010b, p. 433).

Another effective approach to comprehension instruction is to teach the strategies that “good readers” use to understand text (Pressley, 2000). These skills and strategies include the following: a) reading words rapidly and accurately, b) noting the structure and organization of text, c) monitoring their understanding while reading, d) using summaries, e) making predictions, checking them as they read, and revising and evaluating them as needed, f) integrating what they know about the topic with new learning, and g) making inferences and using visualization (Kamil, 2003; Klingner, Vaughn, & Boardman, 2007; Mastropieri, Scruggs, Bakken, & Whedon, 1996; Pressley & Afflerbach, 1995; Swanson, 1999a).

Perhaps the most widely cited approach for improving the reading comprehension for struggling adolescent readers, however, is comprehension instruction that is direct, explicit and strategic (Biancarosa & Snow, 2006; Edmonds et al., 2009; Gajria et al., 2007; Gersten et al., 2001; Kamil et al., 2008; Mastropieri et al., 2003; NRP, 2000; Roberts, Torgesen, Boardman, & Scammacca, 2008; Scammacca et al., 2007; Swanson, 1999a). Explicit comprehension instruction includes a direct explanation of the strategy, teacher modeling, guided practice, and independent application (Armbruster, Lehr, & Osborne, 2001). Explicit comprehension strategy

instruction teaches students how to actively monitor their understanding of text during and after reading through questioning and reflecting (Edmonds et al., 2009).

Collectively, this research demonstrates that a variety of individual and multiple strategies and instructional components are highly effective for improving the reading comprehension for students with LD. This same research, however, also indicates that it is not the particular strategy or method as much as it is the teacher's use of the practice that makes it effective (Duffy, 1991; Gersten et al., 2001; NRP, 2000; Sencibaugh, 2007; Snow, 2002; Swanson, 1999a). This finding supports the belief that the classroom teacher is the most powerful intervention for students who struggle to read (Darling-Hammond, 1997; NRP, 2000; Snow, Burns, & Griffin, 1998). It is imperative, therefore, that special education teachers who teach reading to students with LD be knowledgeable about evidence-based reading interventions and implement them "accurately, consistently, and intensively" so as to enhance their reading comprehension (Division for Learning Disabilities, 2002, p. 2).

Statement of the Problem

The problem is a complicated one: significant numbers of adolescents with LD struggle to comprehend what they read; yet secondary education does not typically provide the reading comprehension instruction that these students need. Comprehension instruction research is promising, and many strategies have been effective for older, struggling readers. Because students with LD are already lagging behind their peers, reading instruction for students with disabilities at the secondary level must be explicit, iterative and intensive to achieve academic success (Division for Learning Disabilities, 2002; Vaughn & Linan-Thompson, 2003). However, many secondary educators do not feel prepared to implement these explicit and intensive reading strategies.

The devastating statistics of struggling adolescent readers with LD, coupled with what we know about the literacy demands of secondary school, reveal the magnitude of the problem and underscore the importance of providing intensive, explicit, evidence-based reading comprehension instruction in secondary school classrooms. Despite the reality that as many as 70% of secondary students require some form of reading remediation (Biancarosa & Snow, 2006), reading instruction is not typically provided at the secondary level (Edmonds et al., 2009). In secondary schools, “the responsibility for teaching reading and writing often seems to belong to no one in particular” (Heller & Greenleaf, 2007, p. 15) and instruction generally moves forward regardless of whether or not students have mastered the material (Deshler et al., 2006). Although reading comprehension instruction can improve students’ retention and understanding of the domain-specific information in secondary content-area classrooms (Biancarosa & Snow, 2006; Heller & Greenleaf, 2007; Kamil, 2003; Torgesen et al., 2007), secondary teachers report that they are not adequately prepared to teach reading instruction at this level (Manset-Williamson & Nelson, 2005).

Previous research on reading instruction for students with LD has focused heavily on elementary resource rooms. For decades, the resource room has been the primary setting for special education for students with LD (Schloss, Smith, & Schloss, 2001). Observation research has consistently deemed the amount and quality of reading instruction inadequate for the populations served, citing little to no evidence of comprehension or strategy instruction (Moody, Vaughn, Hughes, & Fischer, 2000; Vaughn, Moody, & Schumm, 1998). Swanson (2008) described this scenario as a “disconnect between what occurs during reading instruction for students with LD and research-supported components of effective reading instruction” (p. 130). In light of these disturbing results at the elementary level, surprisingly little is known about what

reading instruction for students with LD looks like in secondary special education classrooms. In a synthesis of 21 studies on reading instruction conducted in 2008 by Swanson, only two studies were conducted in secondary classrooms (Meents, 1990; Rieth et al., 2003). Fortunately, reading research has identified a number of evidence-based reading interventions that have been beneficial for this population, yet the extent to which these practices have made their way into secondary classrooms is unclear. Swanson (2008) suggested, “As the field continues to identify essential components of reading instruction for students with LD, it will be important to document implementation in classrooms where students with LD are served. In other words, is what has been described in research making its way into classrooms?” (p. 131). Therefore, a study that extended previous research on reading instruction for students with LD to the secondary level in urban high schools was required.

Purpose of the Study

The purpose of this study was to examine the reading comprehension instruction in special education reading classes for ninth grade students with LD. This particular reading course was selected for numerous reasons. Most of the previous observational research reviewed was situated in the elementary reading resource room, and this study sought to extend the literature into secondary school reading classrooms. Furthermore, although both general education and special education teachers share the responsibility for educating students with disabilities, much of the literature suggests that in inclusive settings, instruction is delivered primarily by the general education teacher while the special education teacher assumes a more supportive role (Harbort et al., 2007; Weiss & Lloyd, 2002; Zigmond & Matta, 2005). Therefore, the special education classroom was selected as it offered the most opportunities to observe special

education teachers assuming the most active roles in making instructional decisions and leading classroom instruction.

Specifically, this study employed direct classroom observations to describe what special education teachers did related to teaching reading comprehension. Additionally, teacher interviews were conducted to better understand the factors that special educators identified as influencing their reading comprehension instructional decisions. This qualitative study contributes important descriptive information on the reality of reading comprehension instruction for adolescent students with LD in secondary schools.

Research Questions

This study was designed to answer the following questions:

1. What reading comprehension instruction strategies, practices, and activities do special education teachers implement in ninth grade special education reading classrooms for students with LD?
2. What factors do special education teachers state as influencing their use of the observed reading comprehension instruction strategies, practices, and activities?

II: REVIEW OF THE LITERATURE

An examination of what is already known about various aspects of reading comprehension is required in order to establish the theoretical framework of this study that focuses on reading comprehension instruction in secondary special education classrooms. Thus, this review of literature is organized into four major areas: students with LD and reading development, reading comprehension models, reading comprehension instruction, and reading comprehension instruction in special education classrooms. To the maximum extent possible, each of these areas of research will be presented with respect to the adolescent student.

Reading is a complex process that requires multiple cognitive skills and strategies. Some of these include phonological awareness, visual and auditory memory and processing, semantic and syntactic processing, decoding, oral language, vocabulary, fluency, comprehension, background knowledge, reasoning, and metacognition (NRP, 2000; Snow, 2002; Snow et al., 1998). Skilled reading comprehension, in particular, requires readers to actively coordinate multiple complex processes all at once, prompting researchers such as Gray and Reese (1957) to describe this process as “little short of a miracle”. In simple terms, reading comprehension is the ultimate goal of reading (Kamil, 2004). It is the process of making meaning from or understanding text. Several different definitions have been proposed in the literature. Durkin (1993), for example, considered reading comprehension an active, problem solving process that involves “intentional thinking during which meaning is constructed through interactions between text and reader” (p. 5) while the RAND group defined reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (Snow, 2002, p. 11). Another variation, proposed by Calfee (2009), defines reading comprehension as “the strategic reconstruction of a text toward a particular purpose” (p.

xiii). Although these definitions vary slightly, they all suggest that at the core of reading comprehension is the ability to read with understanding.

Students with LD and Reading Development

According to the Individuals with Disabilities Education Improvement Act (IDEA, 2004), the federal law that governs special education, the term *specific learning disability* is defined as “...a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia” (20 USC § 1401) and is presumed to be the result of dysfunction in the central nervous system (Strauss, 2011). Nearly half of all students in special education are identified with LD (Denton, Vaughn, & Fletcher, 2003). For this population of learners, reading is often the most difficult area (Mastropieri et al., 2003); approximately 80% of students with LD experience significant problems in reading (Gersten et al., 2001).

It is well established that reading acquisition develops over time, with different cognitive processes being more important than others at particular stages (Spear-Swerling, 2011). In typically developing children, learning to read requires two broad types of abilities: word recognition and oral language comprehension (Chall 1983; Gough & Tunmer, 1986; Spear-Swerling, 2004; Stanovich, 2000), both of which comprise a number of additional skills and abilities. Word recognition, for example, includes letter-sound relationships, decoding, and automatic word recognition; oral language comprehension consists of vocabulary, sentence processing, text structure, background knowledge, inferencing, and the application of various comprehension strategies (Spear-Swerling, 2004). Although word recognition and reading

comprehension are believed to develop in tandem, early reading instruction emphasizes word-recognition skills while reading instruction in the later grades focuses more on higher-order comprehension (Spear-Swerling, 2011). Around the fourth grade, the reading comprehension demands increase significantly and the emphasis shifts from “learning to read” to “reading to learn” (Chall, 1983). At this point, most typical readers have acquired the basic word-recognition skills needed to successfully make this transition. Many students with LD, however, continue to have difficulties with specific word recognition. Moreover, it is at this stage that problems with comprehension often emerge (Spear-Swerling, 2011).

Students with LD are a heterogeneous group who demonstrate significant within-reader variability (Fletcher, Morris, & Lyon, 2003; Frankel et al., 2011; Valencia, 2011). Research suggests that students with LD who struggle with reading have difficulty with specific word recognition, specific reading comprehension, or have mixed difficulty with both word recognition and reading comprehension (Buly & Valencia, 2002; Hock et al., 2009; Rupp & Lesaux, 2006; Spear-Swerling, 2011). For example, Leach, Scarborough, and Rescorla (2003) examined the word-level and reading comprehension skills of 161 fourth and fifth grade students. They found that 35% experienced word-level processing deficits only, 32% experienced reading comprehension deficits only, and another 32% experienced both word-level and reading comprehension deficits. Investigating reading disabilities in older students, Catts, Hogan and Adolf (2005) examined 154 poor eighth grade readers and found that 13.3% had word-level processing deficits, 30% had reading comprehension deficits, and 36% had both word-level and reading comprehension deficits. These results suggest that as students get older, their deficits are more apparent at the comprehension level or a combination of the two.

Difficulties with word recognition for students with LD are phonologically based, influenced by the inability to associate sounds with letters (Siegel, 2003; Spear-Swerling, 2004; Stanovich, 2000). When phonological processing is impaired, word recognition is slow and inaccurate, contributing to difficulties with phonemic awareness, decoding, and reading fluency (Spear-Swerling, 2011). Spear-Swerling (2004) has described reading disability patterns across six phases of typical reading development. It is believed that students who struggle with specific word recognition deviate from the typical developmental path in one of the first four phases that students with LD often deviate from: visual-cue word recognition, phonetic-cue word recognition, controlled word recognition, and automatic word recognition. Any one of these four patterns can result in reading failure and impaired reading comprehension.

For students who struggle with specific reading comprehension, these patterns suggest normal progress until about fourth grade or later when text comprehension demands increase. During this time disruptions in the phases of automatic word recognition and strategic reading occur, resulting in students becoming nonstrategic readers (limited use of reading comprehension strategies) or suboptimal readers (limited higher-order comprehension abilities). Many students with reading comprehension difficulties have deficits in vocabulary, working memory, inferencing, comprehension monitoring and active use in comprehension strategies (Cain, Oakhill, & Bryant, 2000). Other students experience difficulties in word recognition and reading comprehension and require instructional support that addresses both. Similar to students with difficulties in word recognition, students with reading comprehension difficulties and students with mixed reading difficulties are at risk of reading failure. (For more information on these patterns see Spear-Swerling, 2004).

As evidenced by the trajectories presented here, students with LD experience reading difficulties based on deviations at different phases of the typical path of reading development. These deviations negatively affect reading comprehension in various ways. Although it is unclear exactly how many older students with LD continue to struggle with word recognition versus reading comprehension or both (Biancarosa & Snow, 2006), research suggests that even when the ability to decode is controlled, students with LD experience significantly more difficulty comprehending written text than their typically achieving peers (Englert & Thomas, 1987; Taylor & Williams, 1983). A discussion of these various reader profiles necessitates a basic understanding of some of the reading comprehension models that have influenced both research and practice.

Reading Comprehension Models

For decades, theorists have been developing and revising models to describe the processes involved in reading comprehension. Although we have made considerable progress, many would agree that this understanding is still far from complete (Kintsch & Kinstch, 2005). Over time, the reading field has witnessed several changes in theoretical paradigms, from behaviorist to cognitive to sociocultural (Gaffney & Anderson, 2000), dividing the history of reading research into three distinct time periods: before 1975, between 1975 to the early 1990s, and the early 1990s to the present. While each period has assumed a dramatically different perspective on the process of reading comprehension, they have all influenced the direction of reading research and practice in significant ways.

Reading has always been a part of classroom practices; however, before 1975 it is believed that little reading comprehension was taught (Pearson, 2009). Instead, this period focused much attention on science, measurability and objectivity, setting the groundwork for the

emergence of standardized tests and readability formulas. Influenced by the behaviorist perspective, the process of reading was divided into a set of discrete reading skills that were taught and tested in a systematic way (Pearson & Stephens, 1994) and reading comprehension was perceived as a conditioned response.

Information processing models. Deemed the “Cognitive Revolution”, the period between 1975-1990 yielded extraordinary improvements in our understanding of reading comprehension (Pearson, 2009). Although researchers such as Chomsky began to critique behaviorist theories in the mid 1950’s, his work was not widely applied to reading comprehension until the 1970’s when psychologists turned their attention to the cognitive processes involved in reading (Alexander & Fox, 2004). Perhaps the most important shift during this period was the emphasis on the individual (reader) as an active constructor of meaning in the reading process (Anderson, 1977). As a result, information-processing models dominated this period and reading comprehension came to be described in terms of the mental operations employed while reading, including input, interpretation, organization, retention, and output (Samuels & Kamil, 1984). Perhaps the most widely cited reading theory (Blanchard, Rottenberg, & Jones, 1989), the LaBerge-Samuels automatic information-processing model maintained that automatic comprehension was the result of rapid text decoding. They outlined their argument as follows:

During the execution of a complex skill, it is necessary to coordinate many component processes within a very short period of time. If each component process requires attention, performance of the complex skill will be impossible, because the capacity of attention will be exceeded. But if enough of the components and their coordinations can be processed automatically, then the loads on attention can be within tolerable limits and the skill can be successfully performed. Therefore, one of the prime issues in the study of a complex skill such as reading is to determine how the processing of component subskills becomes automatic (LaBerge & Samuels, 1974, p. 293).

The simple view of reading. Another widely accepted model, the simple view of reading (Gogh & Tunmer, 1986), extended the automatic information-processing model by describing reading comprehension (RC) as the product of listening comprehension (LC) and decoding (D): $RC = LC \times D$. This model attributed gains in reading comprehension to increases in the automaticity of decoding. While both the automatic information processing model and the simple view of reading illuminate the important link between decoding and comprehension, we know that decoding is necessary but insufficient for reading comprehension and that this process is far more complex, requiring the coordination of multiple processes.

Schema theory. Yet another important focus during this influential period was on the critical role of prior knowledge in reading, paving the way for the development of schema theory. Said to be one of the most popular movements of the 1970's (Pearson, 2009), schema theory described how the mind organizes knowledge and how, when activated, that knowledge shapes the meanings we make from what we read (Anderson, 1984). This model has been particularly relevant to students with LD who experience significant difficulty comprehending what they read due to their lack of both general knowledge and knowledge of text structure (Gersten et al., 1998).

Construction integration model. In the construction integration model, Kintsch (1998) offered an additional explanation of the cognitive processes of reading comprehension. According to this model, comprehension consists of three interactive processes that occur at varying levels of depth and difficulty: decoding, constructing a textbase, and developing a situation model. Decoding the text produces a set of propositions that are incorporated into a textbase. Readers integrate the mental concepts that are most relevant to the situation while

others are discarded. This model illuminates the active participation of the reader and recognizes the significant role of background knowledge in constructing meaning in any given situation.

Metacognition. In the late 1970's and early 1980's, researchers began to describe readers as *strategic* and the mental processes they used in reading as *cognitive strategies* (Paris, Lipson, & Wixson, 1983). Based on Flavell's model of cognitive monitoring, metacognition became widely recognized as a critical component of active reading. This term refers to the knowledge and control of our own cognitive processes (Baker, 2002). Flavell (1979) suggested that reading involves both declarative knowledge and procedural knowledge. Declarative knowledge includes understanding the demands of tasks related to text while procedural knowledge concerns knowing how to monitor, regulate, and evaluate ongoing comprehension. Later, Paris and colleagues (1983) advocated that a third type of knowledge be included in metacognitive processes – condition knowledge, knowing how and why a particular cognitive strategy is applied.

Adolescent reading model. In the years since the Cognitive Revolution, information processing models such as schema theory and metacognition have continued to influence the direction of reading research reading, with an additional emphasis placed on the social contexts of teaching and learning (Pearson, 2009). Although much of the available reading research has centered on younger students, in recent years the emphasis has turned to the unique needs of older struggling readers for whom reading comprehension has been described as both the central goal and barrier (Biancarosa & Snow, 2006). These proponents argue for yet another paradigm shift in how we study literacy instruction, suggesting that improving the reading comprehension in adolescent readers requires different instructional emphases and pedagogy than their younger

counterparts. As a result, Deshler and Hock (2007) developed the adolescent reading model, which suggests a balanced, three-pronged approach to reading instruction.

First, the adolescent reading model recognizes that while most adolescents have developed the foundational skills typically associated with early reading instruction such as decoding and fluency, many continue to need explicit instruction in word recognition. Next, proponents of this model advocate for reading language comprehension instruction in areas such as vocabulary and text structures. Last, this model highlights that adolescent readers require instruction in cognitive and metacognitive strategies. The goal of this instructional model is increased reading comprehension across a variety of texts and situations.

A review of reading comprehension models makes it apparent that current practices of effective evidence-based reading instruction are deeply rooted in a long history of reading research. The current body of comprehension research includes both descriptions (of classroom instruction or textbooks) and interventions (of strategies or activities on student comprehension). For students with LD, reading comprehension instruction research focuses primarily on strategy instruction, suggesting that students with LD are inefficient readers who have deficits in the domains of strategic processing and metacognition (Gersten et al., 1998; Gersten et al., 2001; Mastropieri et al., 2003) and that when explicitly taught to apply strategies to text, their comprehension improves. Fortunately, this research is promising, suggesting that adolescence is not too late to intervene and that older students with LD do benefit from reading instruction at both the word and text level (Scammacca et al., 2007).

Reading Comprehension Instruction

Over 10 years ago, a group of leading reading researchers reviewed and summarized the research available in reading across the key areas of alphabetics, fluency, comprehension,

teacher education, and computer technology (NRP, 2000). As perhaps the most extensive research review to date, this work has had a significant impact on the direction of reading instruction, research, and policy. This report has contributed to the development of various educational guidelines, including the No Child Left Behind Act, and has been the foundation for establishing the five components of effective early reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NRP, 2000).

Of particular interest to the present study was the work produced by the comprehension subgroup of the NRP. This group reviewed 203 studies that explicitly addressed reading comprehension with typical readers. These studies were grouped into 16 categories, each of which represented a specific instructional strategy. The NRP defined a strategy as a “particular procedure that guide[s] students to become aware of how well they are comprehending as they attempt to read or write” (p. 4-40). Of the 16 categories, the following eight strategies were found to have strong scientific evidence for improving comprehension for typical readers: comprehension monitoring, cooperative learning, graphic and semantic organizers, story structure, question answering, question generation, summarization, and multiple strategies. The comprehension subgroup concluded that text comprehension “can be improved by teaching students to use specific cognitive strategies or to reason strategically when they encounter barriers to comprehension when reading” (p. 4-39), suggesting that explicit comprehension strategy instruction is the essence of comprehension instruction.

Although the NRP chose not to include any studies that dealt exclusively with students with disabilities, research on effective comprehension instruction for students with LD yields similar findings, suggesting that students with LD also benefit most from explicit instruction that teaches them how to think when reading (Gersten et al., 2001; Mastropieri et al., 2003). Reading

comprehension is a purposeful, interactive process that involves more than 30 cognitive and metacognitive processes (Block & Pressley, 2002). Over the past few decades, a significant number of studies, including literature reviews, research syntheses, and meta-analyses, have been published in an effort to identify the most effective practices in reading comprehension instruction for students with LD (e.g., Berkeley et al., 2010b; Gajria et al., 2007; Gersten et al., 1998; Gersten et al., 2001; Mastropieri & Scruggs, 1997; Sencibough, 2007; Swanson, 1999a; Swanson, 1999b; Swanson & Hoskyn, 1998; Talbott et al., 1994; Vaughn et al., 2000). Together, this body of work underscores the necessity of teaching students with LD the cognitive strategies to more efficiently process information. A review of this reading comprehension instruction research for students with LD follows.

Syntheses and meta-analyses on reading comprehension and LD. In an effort to synthesize the growing body of literature on reading comprehension for students with LD, Talbott and colleagues (1994) analyzed 48 intervention studies. Various dimensions of each study were categorized and coded, including student characteristics, experimental methods, type of intervention, and characteristics of the intervention. Meta-analysis was then used to identify the effect sizes of these dimensions. Related to student characteristics, the average age of students was 13 years old across the 48 studies. Results found that the effect size for high school students ($M = 2.26$) was significantly higher than students in elementary school ($M = .756$). Additionally, stronger effect sizes were found for researcher-delivered interventions ($M = 3.75$) than interventions delivered by research assistants ($M = 1.16$). However, results did not suggest a significant difference among the three most common reading interventions delivered – factual questions, recall assessments, and strategy assessments. Perhaps the most encouraging finding

from this study was that students who received a reading comprehension intervention performed better than 87% of students in control groups.

A few years later, Swanson (1999a) undertook an extensive meta-analysis of word recognition and reading intervention studies for students with LD published between 1963 and 1997. Specifically related to comprehension instruction, 58 studies were included. These studies were coded across 20 previously identified instructional components that influence student outcomes, including sequencing, strategy modeling, and advance organizers and effect sizes were calculated for each intervention. Overall, these reading comprehension interventions had an effect size of .72. Specifically, the combination of strategy instruction and direct instruction yielded the greatest effects ($M=1.15$). Further analysis resulted in the identification of six instructional components that were most important in predicting high effect sizes across reading comprehension studies. These predictors included: directed response/questioning, control of processing task difficulty, elaboration, teacher modeling, small group instruction, and strategy cues. Moreover, this meta-analysis resulted in the identification of six core components commonly found in both strategy and direct instruction, including: a) daily review of material, b) statement of lesson objective, c) teacher-led presentation of new material, d) teacher-led student practice, e) independent student practice, and f) formative student evaluation (Swanson, 1999b). While Swanson's work highlighted some of the most effective practices over 30 years of research, these results are complicated as studies used various criteria for LD inclusion, several of the instructional models contained common components, and effect sizes for comprehension did not distinguish between expository and narrative texts.

In a subsequent study, Gersten and his colleagues (2001) reviewed 20 years of comprehension instruction research across expository and narrative texts for students with LD.

The authors emphasize that expository text is more challenging for students than narrative text for three reasons: expository text is longer, contains more abstract arguments, and contains more complicated and varied structure. Supporting the previous findings by Swanson (1999a), Gersten et al. (2001) concluded that for expository text, an approach that includes both direct instruction and strategy instruction yields the most positive effects and are the most likely to transfer to generalized reading. For narrative texts, explicit instruction in story grammar has been effective for improving text comprehension. Although Gersten and colleagues recommended explicit comprehension instruction, the maintenance and transfer effects were unresolved.

In a related review, Gajria et al. (2007) summarized 29 reading comprehension interventions specifically with expository text. These studies were classified as content enhancements and cognitive strategy instruction. Content enhancements are instructional devices that facilitate the comprehension and retention of content area information. Cognitive strategy instruction describes how to learn and approach text. Results of this synthesis were reported in various ways, including by student characteristic, instructional feature, methodological feature, and strategy maintenance and generalization. Overall, content enhancements produced a mean effect size of 1.06 ($SD = .63$) while cognitive strategy instruction produced a mean effect size of 2.07 ($SD = 1.28$), with an effect size of 1.83 ($SD = 1.05$) for single cognitive strategies and 2.11 ($SD = 1.74$) for multiple cognitive comprehension strategies. These findings indicate large effects for both types of interventions and suggest that text comprehension techniques that are direct, explicit, and systematic are more effective than traditional methods.

In 2007, Sencibaugh extended Swanson's work and released his own meta-analysis of reading comprehension interventions for students with LD. Fifteen studies were reviewed,

including 23 separate reading comprehension interventions. These interventions were identified as visually dependent or auditory/language dependent strategies. Visually dependent strategies used pictures or visual ability to improve reading comprehension while the auditory/language dependent strategies used with either pre-reading or post-reading activities to promote comprehension. Results of the meta-analysis found the effect size for visually dependent strategies to be .94 ($n=3$) and for auditory/language dependent strategies to be 1.18 ($n=13$). Although these results suggest positive outcomes for both types of interventions, auditory/language dependent strategies (i.e. self-questioning, retelling, etc.) had a greater impact on the reading comprehension skills of the participants.

In an effort to summarize the available literature, Faggella-Luby and Deshler (2008) examined six literature reviews and research syntheses on reading comprehension for both adolescent and non-adolescent students with LD. They found the following six key themes consistently supported across this body of work: 1) targeted instruction can improve reading comprehension for both students at risk and students with LD; 2) students with LD benefit most from reading comprehension instruction that includes cognitive strategies, text structures, cooperative learning opportunities, and blended components of these elements; 3) students benefit most from cognitive strategies that focus on self-monitoring, summarizing, and self-questioning; 4) both elementary and secondary students benefit from reading comprehension interventions; 5) explicit instruction increases reading comprehension for students at risk, students with LD, and typically achieving students; and 6) explicit strategy instruction is the biggest indicator of positive student outcomes. Additionally, the following individual components of effective reading comprehension instruction were cited: a) knowledge of text

structures (narrative and expository), b) vocabulary, c) prior knowledge, d) cognitive strategies, and e) increased motivation.

Extending their previous work, Berkeley and colleagues (2010b) recently calculated the effect sizes for 40 studies published between 1996 and 2006 on reading comprehension interventions for students with LD. Students included in the studies were in grades K-12 and had been identified as having LD. Interventions were separated into four categories: questioning/strategy instruction, text enhancements, fundamental reading skills instruction, and other. The overall mean effect size for these reading comprehension interventions studies was 0.65, comparable to the 0.72 effect size reported earlier by Swanson (1999a). The effect size for questioning/strategy instruction was 0.75 and included interventions such as direct questioning while reading, instruction in questioning strategies, including self-questioning. The effect size for text enhancements was 0.62 and included interventions such as graphic organizers and technology related tools. Finally, the effect size for fundamental reading skills was 1.04. The studies in this category all used packaged intervention programs such as the Failure Free Reading Program and Embedded Phonics. Overall, these findings validate the results of previous syntheses and demonstrate the efficacy of a wide range of reading comprehension interventions for students with LD.

Although less research has been conducted exclusively on older students with LD, a handful of major studies have emerged in an effort to summarize our understanding of effective reading comprehension instruction specifically for adolescents with LD (e.g. Edmonds et al., 2009; Mastropieri et al., 2003; Roberts et al., 2008; Scammacca et al., 2007; Scruggs, Mastropieri, Berkeley, & Graetz, 2010). This body of work has made significant contributions to the evidence base on reading comprehension instruction, suggesting that adolescence is not too

late to intervene and that older students, including those with LD, do benefit from reading interventions (Scammacca et al., 2007).

In 2003, Mastropieri and her colleagues described the available research on reading comprehension instruction for secondary students with disabilities. Instructional practices cited in the review included peer-tutoring, spatial organizers, and computer-assisted instruction. Several important conclusions were found, including: 1) specific interventions do improve reading comprehension for students in secondary school (specific features of these interventions include cognitive strategy, direct instruction, guided practice, and independent practice); 2) strategies found to be effective for younger students with LD have similar effects for older students with LD; and 3) the intensity of the instruction is a significant factor - students with LD require intensive and explicit instruction if they are to be successful.

In an extensive report, Scammacca et al. (2007) released a meta-analysis of reading interventions for adolescents with reading difficulties or with identified LD, as well as implications for practice. The meta-analysis included 31 studies, all of which used interventions related to fluency, vocabulary, reading comprehension strategies, word study, or multiple elements of reading instruction. Participants were limited to middle and high school students and either the teacher or the researcher provided all interventions. Because of the importance of reading comprehension for older students, the 23 studies that included one or more measures of reading comprehension were analyzed separately. The overall effect size for these studies was 0.97. Additionally, it was found that participants receiving the intervention resulted in reading comprehension skills almost one standard deviation greater than the skills of students who did not receive the intervention. Interventions by LD status were also analyzed separately, and an effect size of 1.33 was found for all students identified as LD for all reading comprehension

measures. Implications suggest that students with LD and struggling readers can benefit from well designed, effectively delivered, appropriate reading intervention.

In another review of evidence-based reading strategies for older students with LD, Roberts and colleagues (2008) revised the five essential areas of effective early reading instruction previously identified by the NRP (2000) to include: 1) word study, 2) fluency, 3) vocabulary, 4) comprehension, and 5) motivation. The authors noted that for some students with more serious reading difficulties, a continued focus on early reading instruction that includes components of phonics might be appropriate. Additionally, several effective elements of reading comprehension instruction are also described, including activating prior knowledge, using graphic organizers, teaching comprehension-monitoring strategies, modeling, and scaffolding instruction.

More recently, Edmonds and colleagues (2009) published a synthesis of 29 studies that included reading interventions for older students with reading difficulties. These studies spanned over twenty years and included struggling readers in grades 6-12. For each study, the design, number of participants, grade, duration, person implementing the intervention, type of intervention, measure, and findings are presented. Additionally, a meta-analysis was conducted on 13 of the studies, revealing an effect size of 0.89 for the weighted average of the difference in comprehension outcomes between treatment and comparison students. These findings suggest that reading comprehension instruction that engages students in thinking about text, learning from text, and discussing what they know will yield greater comprehension outcomes for students with reading difficulties and disabilities.

In a meta-analysis of content area instruction interventions for adolescents with LD, Scruggs and colleagues (2010) sought to identify the most effective evidence-based practices at

the secondary level. In all, 70 original content area (Science, Social Studies, and English) intervention studies were included in this meta-analysis, accounting for more than 2,400 secondary aged (middle, junior, and high school) students with disabilities. The studies included in this meta-analysis were published from 1984 – 2006. The interventions used in the studies were classified as explicit instruction (4.3%), study aids (5.7%), classroom learning strategies (17.1%), mnemonic strategies (30.0%), spatial organizers (20.0%), hands-on or activity-oriented learning (5.7%), peer-mediation (7.1%), or computer-assisted instruction (10.0%). Effect sizes were identified for each study and subdivided into treatment, maintenance, and generalization effects. Results indicated that treatment effect sizes were highest when provided in a separate classroom and by special educators (after researchers). Higher effects were also found in high schools. Overall, moderate to high effect sizes were found for the interventions across different content areas and educational settings. Maintenance was high and generalization was moderate. The effect size for each category of intervention was greatest for explicit instruction ($M = 1.68$), mnemonic instruction ($M = 1.47$), and classroom learning strategies ($M = 1.11$).

Collectively, these literature reviews, research syntheses, and meta-analyses have made significant contributions to the literature on reading comprehension instruction for students with LD. While these comprehensive reviews have summarized the evidence base on reading comprehension instruction over the past four decades, a closer examination of current individual research studies on reading comprehension instruction for adolescents with LD is warranted.

Reading comprehension strategy instruction. Direct and explicit strategy instruction has emerged as one of the most effective classroom intervention practices for improving the reading comprehension for struggling adolescent readers (Kamil et al., 2008). Direct and explicit teaching implies teacher modeling, explanations of the strategy, opportunities for guided practice

with feedback, and additional opportunities for independent practice. Comprehension strategies include routines and procedures that readers use to make sense of texts, such as graphic organizers, summarizing, asking questions, identifying the main idea, and paraphrasing. Research suggests that the reading behavior of students with disabilities is inefficient and inflexible, making this population of learners excellent candidates for strategic instruction (Sencibaugh, 2007). Although the research on reading comprehension strategy instruction for adolescents with LD is promising, over the past five years, only five studies investigating the effectiveness of strategy instruction on reading comprehension for this older student population have been located. A brief review of this emerging body of literature follows.

In a study examining the effects of explicit instruction of self-regulation strategies on reading comprehension, Antoniou and Souvignier (2007) worked with 73 students with LD in fifth through eighth grade. Fourteen classrooms were randomly assigned to treatment group and 13 to a control group. Both groups were comparable in IQ, vocabulary knowledge, and decoding speed. Teachers were trained to implement the intervention, which included explicit instruction in the cognitive and metacognitive reading strategies, as well as self-regulation strategies. The reading strategies included Thinking About the Headline, Clarification of Text Difficulties, Summarization-Narrative Texts, and Summarization. The self-regulation strategy included a reading plan accompanied by a checklist. The control group received traditional reading instruction. All students were given a pre-test, post-test, and follow-up test three months after the intervention on reading comprehension, reading strategy knowledge, and reading self-efficacy. Short term results were not significant; long-term results demonstrated significantly higher gains on reading comprehension ($d=.80$), on reading strategy knowledge ($d=.62$), and on self-efficacy ($d=.78$) for the treatment group. Findings suggest that students with LD are likely

to enhance their reading comprehension competence by the usage of reading and self-regulation strategies. It is noted that non-significant short-term results may be explained by the additional practice time needed for students with LD to implement strategies.

That same year, Faggella-Luby, Schumaker, and Deshler (2007) examined the effects of the Embedded Story Structure (ESS) routine on reading comprehension strategy use, knowledge of strategy components and literary terms, reading comprehension of stories, and student satisfaction with the routine. Participants included 79 ninth-grade students (14 with LD). All students were identified “at risk” based on EXPLORE results. The study occurred in an inclusive literature class in a private urban high school during summer school. Students were matched according to four variables: a) disability/no disability, b) EXPLORE reading comprehension national percentile score, c) gender, d) age in months. Students were then paired and members of each pair were randomly assigned to one of two groups: ESS or comprehension skills instruction (CSI). ESS was based on validated components of explicit cognitive learning strategy instruction and focused on three reading strategies: self-questioning (before), story-structure analysis (during), and summarizing (after). The ESS Organizer was used to integrate all three strategies and facilitate interactive construction of knowledge. CSI was composed of a package of three evidence-based reading interventions including LINCIS vocabulary strategy, Question-Answer-Relationship (QAR), and semantic summary mapping. The CSI Organizer was used to integrate all three strategies. Eight short stories were used during the study. Data were gathered through several measures and included the Strategy-use test/Knowledge Test, the Unit Comprehension Test, and Satisfaction Surveys. The first author taught all nine lessons to both groups. Results of the study indicate that ESS students (with and without disabilities) outperformed CSI students on Strategy Use, Knowledge Test and Unit Reading Comprehension

Test. A large effect size was found for the ESS group on the posttest and higher levels of satisfaction were found on the posttest for the reading survey. A strong relationship was also found between student use and knowledge of ESS strategies and reading comprehension growth. Results from this study indicate equivalent gains regardless of disability identification.

In a study investigating the effects of explicit instruction in a multi-component inference reading comprehension strategy on eight ninth grade students, Fritschmann, Deshler, and Schumaker (2007) used a multiple probe across subjects design. All participants scored at least five grade levels below current placement on a standardized reading test. Seven of the students had LD and one had MR. Students received inference strategy instruction in 60-75 minute sessions. Students were given three to four reading probes before instruction began and instruction for the second tier began only once scores in the first tier improved. On the comprehension questions, the average correct was 31.74% during baseline, 77.39% during instruction, and 82% at posttest. On the strategy use test, the average correct during baseline was 0%, during instruction 66.39%, and at posttest 81.94%. On the strategy knowledge test, the average correct was 0% at pretest and 91.75% at posttest. Gains from pretest to posttest on the standardized reading test suggest an average increase of 2.82 grade levels in reading comprehension. Student satisfaction from pretest and posttest was also significant, suggesting that students felt more positive about the reading comprehension process after learning and applying the strategies. Additionally, the results of this study suggest that students with LD can learn and apply inference strategies to answer inferential comprehension questions.

Nelson and Manset-Williamson (2006) studied the impact of two reading interventions on the reading self-efficacy, attributions to strategy use and failure, and affect for reading of upper-elementary and middle school students with reading disabilities. This study included 20

students with reading disabilities entering fourth to eighth grades. The students' grade equivalent scores in reading fluency and comprehension were at least two years below grade level. Participants were randomly assigned to the two interventions. Pre and posttests were administered for self-efficacy, strategy use, and affect. Both interventions included reading comprehension strategy instruction but varied in terms of how explicitly the strategies were taught. The Explicit Comprehension Group received explicit, self-regulatory strategy instruction. Instructors used modeling of specific comprehension strategies, including prediction, summarization, and question generation and then had opportunities for guided practice. The Guided Reading Group received less explicit strategy instruction. Instructors used direct instruction to teach each strategy, including purpose and value in comprehension; goal setting and self-monitoring was also explicitly taught. Interventions were one-to-one over five weeks, four days a week, one hour per day. Results indicate that the Guided Reading Group participants reported higher levels of self-efficacy than those in the Explicit Comprehension Group while the Explicit Comprehension Group participants made greater gains in their attributions to incorrect strategy usage than Guided Reading Group. With regards to reading affect, both groups showed improvement, although one group did not outperform the other. Students in the Explicit Comprehension Group made significantly larger gains in their reading comprehension skills than those in the Guided Reading Group.

Most recently, Berkeley, Marshak, Mastropieri, and Scruggs (2010a) used a pre-post experimental design to investigate the effects of self-questioning strategy instruction on the reading comprehension of a grade-level social studies text for seventh graders. In this study, 57 seventh grade students, including eight students with disabilities, were randomly assigned to either the strategy group or the typical practice group where they received 20 minutes of

instruction in two separate classrooms for three days. Each lesson lasted for 20 minutes. The intervention group received explicit reading comprehension strategy instruction; students learned how to use headings and subheadings in textbooks to create comprehension questions and answer them after reading each section of their textbook. The teacher introduced the strategy, explained the purpose, clarified when to use it, and explained how it will help to comprehend text. Additionally, the teacher modeled the strategy with a think-aloud, and provided students with opportunities for guided and independent practice. Students in the control group were prompted to read the textbook chapter and remember as much information as possible. Results of the study found that students in the self-questioning strategy group outperformed the typical practice group on both the multiple-choice test ($M = 10.30$, $SD = 3.54$; $M = 7.70$, $SD = 1.87$) and the open-ended test ($M = 7.03$, $SD = 3.16$; $M = 2.98$, $SD = 1.87$). Students with disabilities also demonstrated larger improvements in the self-questioning group (pretest: $M = 5.23$, $SD = 1.26$; posttest: $M = 9.00$, $SD = 2.94$) versus those in the typical practice group (pretest: $M = 6.00$, $SD = 1.16$; posttest: $M = 7.25$, $SD = 2.22$). Effect sizes were large for both the multiple-choice test ($ES = 0.92$) and open-ended test ($ES = 1.61$). These findings suggest that this self-questioning strategy is highly effective for improving reading comprehension of content area texts for adolescents with LD.

While there is no quick fix for improving reading comprehension for students with LD, the research reviewed here suggests that we have identified a wide variety of effective evidence-based interventions. In summary, effective reading comprehension interventions for students with LD include specific strategies on how to think like proficient readers do and instruction on different text structures (Gersten et al., 2001). Effective interventions include both single strategies such as finding the main idea and self-monitoring, as well as multicomponent

strategies to be applied before, during, and after reading. In particular, researcher-implemented interventions produced greater results than teacher-implemented interventions (Berkeley et al., 2010a; Gajria et al., 2007; Talbott et al., 1994), suggesting that the role of the teacher is paramount in implementing these strategies effectively. Additionally, explicit instruction has produced some of the most positive effects on reading comprehension for students with LD (Biancarosa & Snow, 2006; Gersten et al., 2001; NRP, 2000; Swanson, 1999a).

It has been established that adolescents with LD possess a wide range of knowledge and skills and have difficulties with phonological processing, comprehension or both. Although decoding and fluency skills contribute to reading comprehension, this corpus of research suggests that explicit instruction in reading comprehension strategies is essential to improving reading comprehension for students with LD, particularly for older students who must navigate difficult content area texts. Additionally, reading instruction for adolescents with LD whose reading development often lags years behind grade level must be explicit, intense, and provide more instructional support than their typically developing peers (Foorman & Torgesen, 2001; Zigmond, 2001). As we continue to identify effective evidence-based practices for improving the reading comprehension for adolescents with LD, it is essential to determine the degree to which these practices are being implemented in reading classrooms. Last, we turn to what we already know about reading comprehension instruction in special education classrooms.

Comprehension Instruction in Special Education Classrooms

According to IDEA, students with disabilities must be provided with “specially designed instruction, at no cost to the parent, to meet the unique needs of a child with a disability” (20 USC 1401.25 et seq.). Approximately six million students with disabilities are served in America’s public schools, with 44.6% of them identified with LD, representing the largest

disability category (U.S. Department of Education, 2011). Of students identified with LD, 11.6% are of secondary-school age (ages 12-17).

In 1975, students began receiving direct services in special education classrooms (also referred to as “resource” or “pull-out”) from a special education teacher. These instructional settings were designed for teachers to work with students individually or in small groups to deliver intensive, individualized instruction, often in the area of reading. Almost 12% of all students with LD continue to spend more than 60% of the day outside of the general education classroom (U.S. Department of Education, 2011). With legislation such as No Child Left Behind mandating that teachers use scientifically, evidence-based instruction, coupled with what we know about the reading profiles of students with LD and the key components of effective reading instruction, one would expect to see high quality, “specially designed”, evidence-based comprehension instruction in classrooms designed for students with LD. However, observational research examining reading instruction in special education classrooms reveals a different picture.

Over the past three decades a substantial number of studies have investigated the instructional reading practices in classrooms designed for students with LD. Together this body of observation research has yielded alarming results suggesting that many students with LD do not receive this specialized instruction, particularly in reading, and that little time is dedicated to comprehension instruction. Furthermore, once in special education, students with LD demonstrate limited progress in reading achievement and rarely catch up to their grade-level peers (Moody et al., 2000; Vaughn et al., 1998). In her seminal study, for example, Durkin (1978-1979) documented that while comprehension is often assessed, it is rarely taught. Of the 300 hours observed across 24 reading and social studies classrooms in grades three through six,

Durkin found that teachers devoted almost 18% of instructional time to comprehension assessment via factual questioning posed by the teacher. Direct comprehension instruction, however, was observed only .63% of the time. Instead, students spent a majority of class time working on dittos and workbooks.

More recently, Ness (2011) extended this study to examine the frequency of reading comprehension instruction in elementary classrooms, as well as identify the instructional strategies practiced most by teachers. Of the 50 hours of language arts instruction observed across 20 first through fifth grade classrooms, Ness found that approximately 25% of instructional time was devoted to explicit reading comprehension instruction. The most frequent strategies observed included question answering, summarization, and predicting/prior knowledge. This study presented a stark contrast to the picture painted three decades earlier by Durkin. In fact, Ness found that reading comprehension instruction was the most frequently observed instructional behavior and that teachers were incorporating a variety of strategies recommended in the NRP report (2000).

While the results of Ness' study are promising for reading instruction in general education classrooms, further investigation of special education classrooms is warranted to better understand reading comprehension instruction for students with LD. In 1998, Vaughn and colleagues examined the reading instruction of 14 special education teachers in K-5 resource rooms. Results found that reading comprehension was taught primarily through teacher or student read alouds. Similar to the early findings by Durkin, comprehension was assessed primarily through factual questioning initiated by the teacher. Out of the 41 observations conducted, only one instance of comprehension strategy instruction was observed, suggesting that special education teachers devote little time to comprehension instruction.

In a follow-up study, Moody et al. (2000) examined reading instruction and reading outcomes in the resource room. They found higher levels of small-group and individualized instruction than in the previous study, although whole class instruction remained the dominant format for instructional delivery. Also similar to the previous study was the lack of comprehension instruction observed. Comprehension instruction consisted mainly of literal questions asked by the teacher about stories read. Student assessments revealed no significant gains in reading.

In a synthesis of 16 observation studies from 1975 to 2000 of reading instruction for students with LD or Emotional/Behavioral Disorders (EBD), Vaughn, Levy, Coleman, and Bos (2002) produced similar results. They found that although students received a greater amount of individual and small group instruction, the overall quality of reading instruction was low and students spent more than half of the time allocated to reading instruction completing independent seatwork and worksheets. Additionally, limited time was dedicated to actual reading of text or to direct instruction, particularly in reading comprehension.

In extending the synthesis by Vaughn et al. (2002), Swanson (2008) summarized the observational research literature between 1980 and 2005 on reading instruction for students with LD. Her findings were consistent with previous studies, suggesting that reading instruction for students with LD is relatively low quality, with very little explicit comprehension instruction. Of the 21 studies included in this synthesis, only four reported evidence of comprehension instruction. Perhaps most startling is that these four studies represented 263 observations, of which comprehension strategy instruction was recorded in only three of these observations. In the special education resource room, it was reported that only 8% of instructional time was dedicated to comprehension instruction (Gelzheiser & Meyers, 1991). Equally disturbing in this

synthesis was the variable nature of reading instruction. During allocated reading time, it was reported that resource teachers spent only 44% of the time focused on reading activities and twice as much on non-reading activities (Gelzheiser & Meyers, 1991; Haynes & Jenkins, 1986). Additionally, other studies revealed that 26% of the time was spent engaged in off task behavior, waiting, or classroom management (Leinhardt, Zigmond, & Cooley, 1981).

Of the 21 studies included in this synthesis, only two focused exclusively on reading instruction for students in secondary classrooms and only one of them concentrated on special education classrooms. In the first study, an unpublished doctoral dissertation, Meents (1990) examined the expertise, role, and decisions of twelve high school special education teachers in providing reading instruction to students in the resource room. Through observations, document review, and interviews with teachers and administrators, Meents found that assisting students with completing assignments and preparing for exams for their general education classes was given priority over any other type of instruction. Little, if any, time was spent on remediation or teaching basic reading skills. In fact, it was reported that most of the teachers read aloud to their students and had “perfected a routine such that the teacher not only read the text, but found the answer, explained the answer, and told the students what to write on their paper” (p. 139). These findings suggest that students were not learning strategies to actively monitor their comprehension across a wide range of texts. Instead, teachers were promoting dependent, rather than independent, behavior.

In the second study, Ness (2008) examined the instructional strategies that secondary content teachers use to support struggling readers. Data were collected through both direct classroom observations and teacher interviews. Ness found that teachers prioritized content over reading comprehension instruction. When struggling readers were unable to access the textbook,

teachers deferred to compensatory strategies such as lectures, presenting information through multiple modalities, using alternate texts and group work. While content area reading is critical to the success of students in secondary school, similar to the previous results, these findings suggest that teachers are more likely to remediate content than provide explicit instruction in reading skills.

In the years since Swanson's (2008) synthesis, very few observational studies have been published on reading instruction for adolescents. In her doctoral dissertation, Hollenbeck (2008) explored the comprehension instruction of two sixth grade special education teachers nominated as effective by their administrators. Using both direct classroom observations as well as interviews with the teachers and their administrators, she described the ways in which the teachers facilitated reading comprehension. From this study, Hollenbeck gleaned that effective teachers implement comprehension instruction in a variety of ways. She reported that one of the teachers assumed a more traditional, teacher-centered role in the classroom. Similar to the previous findings reported by Meents (1990), this teacher provided little comprehension strategy instruction. Instead, much of her instruction dealt with answering individual student questions and assisting them on individual tasks. These results suggest that the students were not being provided instruction that facilitates independent reading. The other teacher, however, reportedly provided her students with more individualized reading instruction, and was observed working with students in small groups and teaching students questioning skills. Although she incorporated components of explicit teaching, including modeling, guided practice, monitoring of student progress, and feedback, it was concluded that connections made between these strategies and active reading was insufficient for student's to independently apply these reading strategies.

Another study was recently published by Swanson and Vaughn (2010) which described the amount and quality of reading instruction provided by ten special education teachers in resource rooms for students with LD in second through fifth grade. Findings revealed that comprehension instruction comprised 25.6% of the total instructional time observed. Of this time, reading comprehension monitoring in the form of teacher questioning after reading was the most commonly observed activity (66.3%). Students worked independently on comprehension-related activities for an additional 23.2% of the time allocated to comprehension instruction. These findings are consistent with previous studies of time spent on and quality of comprehension instruction.

Despite our knowledge of evidence-based reading comprehension and strategy instruction for students with LD, much of the observation research reviewed suggests that these practices are not being extensively adopted into the classroom and that reading instruction for students with LD is neither explicit nor intensive, as originally designed and intended. Effective comprehension instruction is far from simple (Kamil, 2004); however, findings indicate that teachers are not using instructional time to teach struggling readers much needed comprehension strategies to independently access complex text. Instead, special education reading comprehension instruction consists of low quality, teacher-led, literal questions about text, independent seatwork, and compensatory strategies when students get stuck. While this tells us much about the reality of reading instruction in elementary classrooms, relatively little is known about reading comprehension instruction for secondary students with LD.

III: METHODS

Over the past decade, observational research has examined reading instruction for students with LD in elementary special education classrooms and has revealed only minimal traces of comprehension instruction, evidence-based or not (Moody et al., 2000; Swanson, 2008; Vaughn et al., 2002). Significantly less, however, is known about reading instruction in secondary classrooms for students with LD. Unfortunately, secondary school may be the “last chance” for many older students to catch up on basic reading skills they will need to succeed in the adult world (Bryant, Linan-Thompson, Ugel, Hamff, & Hougen, 2001). Therefore, the purpose of the present study was to examine and describe reading comprehension instruction taught by special education teachers in a special education reading course for ninth grade students with LD. A secondary interest of this study was to understand the factors that influence reading comprehension instruction by special education teachers to meet the literacy needs of their students with LD. This chapter describes the methodology for the study, including the qualitative approach that guided the study, the recruitment process, the research setting and participants, and the data collection instruments and procedures. It also describes procedures used for data preparation and analysis as well as threats and limitations to the study.

Qualitative Research

This study was conducted in the paradigm of qualitative inquiry. Qualitative research is “a systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context” (Brantlinger, Jimenez, Klinger, Pugach, & Richardson, 2005, p. 195). Qualitative research is particularly useful in bringing forth information that helps further the understanding of people’s attitudes, perceptions, and processes (Glesne, 2006). Qualitative methods were chosen for this study because they result in in-depth information that leads to

greater understandings about social phenomena (Cresswell, 1998). Patton (2002) suggests the use of qualitative methods for the following conditions: 1) individualized outcomes, 2) need for detailed, in-depth information, 3) a focus on diversity among individuals, 4) a focus on the process, implementation, or development of a program or participants, and 5) an interest in learning more about participant beliefs or perceptions of the problem and the solution. The ultimate purpose of qualitative research is to learn about some facet of the social world in its natural setting (Rossman & Rallis, 2003). This method uses the perspectives of the participants to learn about some social conditions and contextualize these issues in their situations. Glesne (2006) suggests that qualitative research has the power to transform social conditions.

Direct observation. Direct observation is a method of collecting open-ended, first-hand data by observing people's behaviors (Mertens, 2005). It occurs in a naturalistic setting and data collection avoids the use of predetermined categories (Adler & Adler, 1994). This method provides an ideal opportunity to examine the content and complexity of classroom-based instruction as the research site is natural to both the teacher and students. This study employed direct observation to explore the comprehension instruction practices, strategies and activities used by special education reading teachers. During observations, the researcher assumed the role of a passive participant, whereby the researcher was present during instruction, but did not interact directly with the participants (Mertens, 2005).

Observational analysis allows the reader to step into the setting and situation that was observed (Patton, 2002). Therefore, the process of documentation is perhaps the most critical element of the direct observation as the "logging record actually constitutes the data" (Loftland, Snow, Anderson, & Loftland, 2006, p. 82). Fieldnotes are the raw data recorded during an observation. They are a "chronological log of what is happening to and in the setting and to and

in the observer” (Loftand et al., 2006, p. 112). The purpose of writing fieldnotes is to record information as “efficiently, correctly, and honestly as possible” (Loftand et al., 2006, p. 116). Fieldnotes must be factual, accurate and thorough without being absorbed by irrelevant details. Descriptive fieldnotes are used to record a description of the events, activities and people during an observation; reflective fieldnotes are used to record personal thoughts, insights, and questions that emerge during the observation (Creswell, 2008). Only data that has been recorded can be systematically accessed for rigorous analysis. This means that the fieldnotes must be detailed. These notes are the “eyes, ears, and perceptual senses for the reader” (Patton, 2002, p. 23).

Although qualitative inquiry is inductive in nature, one must recognize that it is impossible to observe everything. Thus, sensitizing concepts are often used to provide observers with a theoretical framework to organize and focus the complexity of the behaviors and actions observed. These concepts “provide starting points for building analysis, not ending points for evading it” (Charmaz, 2003, p. 259). Since a significant number of actions and interactions occur during any given lesson, many of which are beyond the scope of this study, classroom observations were guided by the sensitizing concepts of explicit instructional practices used to facilitate reading comprehension. Additionally, teacher-student interactions, student-student interactions, student engagement and dialogue during instruction were also noted, providing valuable insight into the lesson as a whole.

Interviews. Describing reading comprehension instruction practices in the classroom was only one aspect of this study. A secondary focus was to illuminate these observed practices by interviewing the participants to better understand the factors that influenced their reading comprehension instruction. The purpose of interviewing is to gain insight into how people understand and make meaning of their experiences (Seidman, 2006). While observations

provide access to one's behavior, interviews provide access to the context of that behavior. Through interviewing, the researcher gathers information directly from the participant, permitting an in-depth exploration of the other person's perspective (Charmaz, 2006; Patton, 2002). Interviews are appropriate when seeking "opinions, perceptions, and attitudes toward some topic..." and they provide an "opportunity to learn about what you cannot see..." (Glesne, 2006, p. 81-82). Therefore, interviews were employed after each observation, providing teachers with an opportunity to elaborate, verify, and clarify the instruction observed.

Patton (2002) describes three variations in qualitative interviewing: the informal conversational interview, the general interview approach, and the standardized open-ended interview. This study employed an open-ended interview approach. Open-ended interviews consist of a predetermined and carefully worded questions used in the same order for each interview (Patton, 2002). While it is important to develop an interview guide to focus the interview, Seidman (2006) cautions there are "no absolutes in the world of interviewing" and that what is most important is to "strive for a rational process that is both repeatable and documentable" (p. 22). Interviews have both advantages and disadvantages. While they provide insight into details that cannot be observed, such as the feelings, thoughts, and intentions of one's behavior, the information provided during interviews is filtered and may be what the interviewee thinks the interviewer wants to hear (Cresswell, 2008; Patton, 2002).

Both direct classroom observations and teacher interviews have been widely used to examine reading instruction for students with LD (Kethley, 2005; Meents, 1990; Moody et al., 2000; Ness, 2008; Rieth et al., 2003; Swanson, 2008; Vaughn et al., 1998). Observations provide access to one's behavior and interviews provide access to the context of that behavior

(Seidman, 2006). Data for this study, therefore, was collected primarily via direct observation and teacher interviews.

Methods

Recruitment process. Purposeful sampling procedures were used to identify secondary schools that met the following criteria: a) school population reflected the diversity of the district (at least 75% of the student population at each school was Black and/or Hispanic and over 80% was low income, and b) schools were identified as neighborhood schools (rather than charter schools, magnet schools, or selective enrollment schools) and served students that lived within the school's attendance boundary. In purposeful sampling, participants and sites are strategically and purposefully selected to understand the central phenomenon (Patton, 2002); cases are selected if they are "information-rich", or are "cases from which one can learn a great deal about matters of importance and therefore worthy of in-depth study" (Patton, 2002, p. 242). Eight secondary schools that met the aforementioned inclusion criteria were identified. After obtaining consent from IRB (see Appendix A) and the district, each of the eight school principals were contacted via email and provided with an overview of the study and the inclusion criteria for participating. Principals were asked to identify teachers that met the following criteria: a) were employed as a full-time special education teacher; b) held a valid state special education certificate; c) taught at least one class period of ninth grade special education reading in a separate special education class setting; and c) taught at least three students with LD as identified per an Individualized Education Program (IEP). Additionally, a request to meet directly with eligible ninth grade special education reading teachers was made. Of these eight schools, two were determined to be ineligible to participate after communicating with the principal (one school did not offer the course in the separate class setting and at another school, the eligible

teacher was preparing for maternity leave). The remaining six principals were interested in the study and provided contact information for eight teachers who met the study criteria.

The eight teachers were contacted via email and provided with an introduction to the proposed study, including the purpose and the procedures involved, as well as the eligibility criteria to participate. Additionally, all teachers were provided with the researcher's email address and phone number, as well as an invitation to meet directly with the researcher to learn more about the study. All eight teachers expressed an interest in participating in the study and were asked to complete the Participant Screening Checklist (see Appendix B). All teachers responded yes to all checklist items and were eligible to participate. The eight teachers agreed to participate and met with the researcher to sign Consent for Participation (see Appendix C).

Setting and participants. The study was conducted in a large, urban school district in the Midwest where 87% of the total population in the district was identified as Black and/or Hispanic. Approximately 13% of the students in this district had IEPs and over 54% of these students were identified with a Specific Learning Disability (State Board of Education, 2010). The research occurred at six neighborhood high schools in this district. The average student population at these schools was 951 (range = 370 - 2350). An average of 18% of the students had an IEP ($SD = 6.2$) and 91% ($SD = 6.9$) received free/reduced cost lunch. Across these six sites, 66% of the students were Hispanic, 30% were Black, and less than 3% were White. The average drop out rate was 6.7% ($SD = 7.6$) and the average graduation rate was 74.4% ($SD = 15.0$). Of the eight special education teachers participating in this study, five of the participants were female and three were male. All teachers held a Master's degree and a special education teaching certificate. Additional certifications earned included English ($n = 2$), Social Studies ($n = 1$), Physical Education ($n = 1$), and Educational Administration ($n = 1$). Teachers averaged

10.8 years ($SD = 8.3$) of teaching experience and 4.4 years ($SD = 4.5$) teaching this particular reading course. None of the participants were certified to teach reading, although one teacher was currently working toward this certification. To maintain participant confidentiality, all teachers have been given a pseudonym. Additional demographic information for each teacher is presented in Table I. All eight participants taught reading to ninth grade students with IEPs in a separate special education class setting. This reading course was an elective for ninth grade students in the district and many schools made it a requirement for all students. Secondary students typically received 250 minutes of instruction per course per week.

TABLE I.

Teacher Demographics

Teacher (pseudonym)	Total years teaching	Years at school	Years teaching reading	School
Angela	12	4	3	A
Cathy	5	4	4	B
Ethan	0.25	0.25	0.25	C
Laura	6	2	4	D
John	26	0.25	5	E
Miguel	16	16	15	E
Rachel	5	2	2	F
Rebecca	16	1	2	F

Although available information on the details of this course was limited, a document on the district's website outlined the fundamental objectives across all grade levels in the core content areas in alignment with the Common Core State Standards for Reading and Language Arts. These targets were organized by the following four "big ideas": comprehension, word knowledge, fluency, and speaking and listening. Here comprehension was defined as "construct(ing) meaning from a wide variety of text using prior knowledge, prediction, inference, questioning, monitoring comprehension, summarizing/synthesizing, analyzing, and evaluating" (School District, 2010, p. 12). For comprehension, the learning targets stated that "by the end of grade nine, students will: synthesize and analyze information using text features of supplementary text; analyze and explain author's use of specific literary devices to convey meaning in texts; infer the main idea and support with evidence from the text; infer an author's unstated meaning and draw conclusions about the author's purpose; interpret and evaluate text; compare and contrast information from multiple texts; and predict probable future outcomes supported by the text" (p. 13).

Instrumentation

Teacher and class profile. The Teacher and Class Profile (see Appendix D) was used to gather demographic data including teaching position, years of teaching experience, education history, certification, and disabilities/characteristics of students in the observed class. Additionally, this Profile solicited information about the reading course, as well as participant knowledge of reading instruction for adolescents with LD. This form was shared with teachers once they agreed to participate in the study and was collected prior to the first observation. Each participant completed the Teacher and Class Profile one time.

Lesson profile. Teachers completed a Lesson Profile (see Appendix E) before each of the three scheduled observations. On this profile, teachers were reminded that each observed reading lesson should incorporate activities that include written text. The Lesson Profile called for teachers to identify important elements of the lesson to be observed, including lesson objectives, materials, text type, comprehension instruction practices, strategies and/or activities, and accommodations/ modifications. Teachers were asked to submit the profile prior to the observation and the data gathered from the Lesson Profile was used to guide the observations and interviews. A total of 24 Lesson Profiles were collected during the study.

Reading comprehension instruction fieldnotes template. Each teacher was observed three times teaching a reading lesson to the same class of students. The observations were scheduled ahead of time and lasted for a complete class period, averaging 47 minutes (range = 35-65 minutes, $SD = 7.2$). The Reading Comprehension Instruction Fieldnotes Template (Appendix F) designed for this study was used to capture and describe the reading comprehension instruction during each observation. This template was developed to encompass both descriptive and reflective fieldnotes to document specific reading strategies, practices, and activities that fostered the capacity of students with LD to comprehend written text. Reading comprehension strategies are “specific procedures that guide students to become aware of how well they are comprehending” as they read written text (NRP, 2000, 4-40). For example, students may be taught how to generate and answer questions as they read as a way to monitor whether they comprehend the text. Reading comprehension practices and activities describe ways that teachers and/or students engage with text that may promote students' reading comprehension. Examples include teacher summarizing and reading worksheets. The template was divided into five-minute segments, which allowed the observer to note what instruction was

occurring during each segment (Zigmond, 2006). Additionally, this template was used to record specific features of each lesson including the date and time, number of students present, lesson objectives, instructional materials, text types, and grouping format. The physical classroom environment was also recorded.

Prior to starting the study, the researcher and an external trained reviewer piloted the Reading Comprehension Instruction Fieldnotes Template with two separate reading lessons from ninth grade special education teachers in the district. These observations served to establish interobserver agreement. Interobserver agreement was calculated by summing the number of agreements (when both observers recorded the presence/absence of instructional behaviors) and dividing them by the total number of agreements and disagreements. The average interobserver agreement was 88% (range = 81%-95%). Additionally, these observations served to identify any challenges in using the instrument and provided opportunities to practice recording fieldnotes. After each observation, the researcher compared fieldnotes with the reviewer to verify that the same practices were observed and recorded. In the event that the fieldnotes differed, observers discussed the differences and reached a consensus about how to best describe the instruction. Notes were adjusted accordingly.

Interview guide. The researcher conducted three audio-recorded interviews with each teacher, one following each lesson observation. The length of the interviews averaged 22 minutes (range = 8-40 minutes, $SD = 8.6$). Using the interview guide approach (Patton, 2002), topics were identified in advance of the interview and aligned to the variables of interest in the research questions (i.e. factors that influenced the reading comprehension instructional practices, strategies, and activities recorded during each observation). This approach was selected as it provided the interviewer with some flexibility to explore a structured set of topics and was

appropriate for illuminating particular situations, such as those specific actions observed during each lesson. Questions emerged from a review of literature on effective reading comprehension instruction practices for students with LD as well as a review of observational research on reading instruction in special education resource rooms. These questions were designed to elicit information about the factors that special education teachers identified as influencing their instructional decisions during the observed reading class.

Once the interview topics were established, Interview Guides were developed (Appendix G). Prior to the study, the researcher's advisor and colleagues reviewed the interview guides to ensure that all items were open-ended and structured to elicit meanings and perspectives from the participants' points of view. Although the interview guides had predetermined prompts for each of the interviews, to the most extent possible, the researcher worked to "listen actively and ...move the interview forward as much as possible by building on what the participant has begun to share" (Seidman, 2006, p. 81). Therefore, the interview guides were not be used verbatim but were used to guide conversations. Because listening is perhaps the most important skill in conducting an interview, the researcher took sparse notes so as to stay on top of what was already discussed and what remained. Before the study commenced, the basic interviews were piloted with three special education teachers to refine the questions, check procedures and solicit any feedback on the researcher's overall interview style. Additionally, based on the findings that were emerging from the first interviews, an additional eight questions were added to the interview guide for the second and third interviews. In this study, all but one of the 24 interviews was conducted on the same day as the lesson observation. Of the total interviews, two-thirds were conducted in person and the rest via phone.

Procedure

All data were collected over a two-month period during the fall semester with each teacher observed no more than once per week. After consenting to participate in the study, teachers were asked to identify the class period that met the inclusion criteria and shared the weekly schedule for that class with the researcher. Participants then completed the Teacher and Class Profile for the selected reading class. Lesson observations were scheduled as agreed upon by the researcher and the teacher. Once scheduled, a majority of the participants completed and submitted their Lesson Profiles prior to the day of the observation. However, two of the teachers did not submit their Profiles the day prior to the observation. In these events, the teacher provided the researcher with an oral overview of the lesson plan while the researcher completed the Lesson Profile. Four observations had to be rescheduled due to conflicting schedules between the teacher and researcher. All teachers were observed teaching the same reading class to the same group of students for the duration of the study.

On the day of the observation, the researcher entered the classroom during the passing period before the lesson and located a nondescript seat near the back of the room that allowed a clear view of the entire classroom. Upon request of the teacher, the researcher introduced herself to the class before the initial observation. This action allowed the researcher to clarify her role and reassure both the teacher and students that she was present to observe the lesson, not to make any judgments or evaluations (Glesne, 2006). The researcher collected data on the instruction that occurred during the observed lessons using the Reading Comprehension Instruction Fieldnotes Template. Each observation began by recording logistics of the class (date, time, and the number of students present), as well noting the physical classroom environment. The lesson objective(s), the type of text (narrative, expository, or “other”), and any instructional materials

used during the lesson were also noted. Once the lesson began, the time was recorded and a five-minute interval recording system was activated. At the beginning of each five-minute segment, the observer noted the grouping format being used at that moment during instruction – whole group, small group, or independent – and recorded it in the fieldnotes. “Whole group” described instruction that targeted the entire class, “small group” described when groups of two to three students worked together on an assignment or activity, and “independent” described when students were engaged individually on an assignment or activity (Allington, 2006; Kim, Briggs, & Vaughn, 2003). Both descriptive and reflective fieldnotes were recorded to describe events as they unfolded in the classroom. The descriptive fieldnotes included descriptions of the classroom, teacher, students, and all instructional activities during the lesson. Because comprehension instruction was the focus of this study, direct quotations from the teacher regarding reading comprehension strategies, practices, and activities were also recorded. Descriptive fieldnotes were written to clearly describe the type of instruction that took place during each five-minute segment. The reflective fieldnotes included any personal feelings or reactions that arose during the observation, as well as any insights or interpretations about what was happening.

To further investigate the reading comprehension practices, teachers participated in an interview with the researcher following each observation. The purpose of the interview was to better understand the teacher’s instructional practices and decision making with regard to reading comprehension and the specific needs of their students with LD. During this time, teachers had an opportunity to illuminate the factors that influenced their instructional decisions to implement the observed reading comprehension instruction strategies, practices, and activities. All interviews were audio recorded to facilitate active listening and were later transcribed for data

analysis. As compensation for participating in the study, teachers received \$50, as well as a \$200 store gift card for instructional materials upon completion of the final interview.

Data Analysis

Qualitative analysis describes the process of transforming data into findings (Patton, 2002) and has been referred to as “finding your story” (Glesne, 2006). This process should be systematic and methodical (Loftland et al., 2006) and requires the data to be organized so that you can make sense of it. In analyzing qualitative data, the researcher must examine, categorize, synthesize, conceptualize, search for patterns, and integrate the data with existing theories or form new theories (Miles & Huberman, 1994; Patton, 2002; Strauss & Corbin, 1998; Walcott, 1994).

Because of the descriptive nature of this study, a theoretical framework was required to capture the multiple dimensions of reading comprehension instruction. Reading comprehension is an active and purposeful process that can be taught through explicit teaching and modeling of the strategies that good readers use. Data analysis occurred throughout the process of data collection and a coding system was developed to most effectively describe the reading comprehension instruction that emerged. Although these codes emerged from the data, many of the descriptions were modified from previous work (Edmonds & Briggs, 2003; Kim, Briggs, & Vaughn, 2003; NRP, 2000; Ness, 2011). To be coded as reading comprehension instruction, the strategy, practice, or activity had to expose students to strategies and practices that good readers use to understand written text. This included teacher modeling, guided practice, and independent practice.

Data analysis began with the collection and organization of the Teacher and Class Profiles. Each profile was read and the demographic information was organized into tables,

noting the participants' previous experiences and backgrounds, as well as student characteristics. Next, as each Lesson Profile was submitted, the researcher read through and highlighted the lesson objectives, texts, and specific reading comprehension instruction strategies, practices, and activities planned for each target lesson. The data were later used to guide the actual lesson observation and interview. After each lesson observation, the fieldnotes were reviewed and all identifying information was removed. The fieldnotes were written into full fieldnotes within 24 hours of the observation, as minimizing the time between observation and writing produces "fresher, more detailed recollections that harness the ethnographer's involvement with and excitement about the day's events" (Emerson, Fretz, & Shaw, 1995, p. 40). Loftland et al. (2006) suggest that the following considerations guide the development of full fieldnotes: be concrete, distinguish notationally among member comments, record recalled information, include analytic ideas and hunches, record personal impressions and feelings, and develop a list of reminders for future observations. Similarly, all identifying information was removed from the audiotapes and a fellow graduate student transcribed each interview verbatim within 48 hours of each interview.

Effective data management requires the researcher to do the following: 1) log data promptly; 2) make data available for duplication; 3) make data available for coding; 4) make coded categories easily accessible for examination and analysis; and 5) make data accessible for revised coding since categories tend to emerge and be revised over time (Loftland et al., 2006). In this study, data were managed using NVivo 9, a qualitative data analysis software program. This program assisted in storing, organizing, and analyzing the data.

Qualitative research is not designed to make generalizations; its purpose is to produce evidence based on specific contexts and individuals (Brantlinger et al., 2005). In this study, data

analysis occurred throughout the entire process of data collection. Although it is natural to have predispositions in reading transcripts, in qualitative research, data analysis is inductive and categories emerge from the data. Forcing the data into predetermined categories defeats the purpose of qualitative research – to identify how the participants make meaning of their experiences (Seidman, 2006). While methods for analyzing qualitative data are abundant, there is no set formula for this process. For this study, the process of data analysis was guided by the work of Miles and Huberman (1994) in which analysis consisted of “three concurrent flows of activity: 1) data reduction, 2) data display, and 3) conclusion drawing/verification” (p. 10). During the first flow, data were read over several times and initial codes were developed. In the second flow, the data were organized into a visual display and relationships between patterns and themes across the data were identified. Finally, in the third flow, the original data were reviewed in an effort to confront any theories, assertions or hunches that emerged during the process. The data were analyzed using both within-case and cross-case analysis.

Once the observation fieldnotes and interview audiotapes were transcribed, they were immediately imported into NVivo 9 and the process of initial coding began. Coding is the “process of sorting data into various categories that organize it and render it meaningful from the vantage point of one or more frameworks or sets of ideas” (Loftland et al., 2006, p. 200). Codes refer to the “tags or labels for assigning units of meaning to...information compiled” during the study (Miles & Huberman, 1994, p. 56). Coding is comprised of two sorting and categorizing processes: initial coding and focused coding. Initial coding, also referred to as “open coding”, is the process of condensing and organizing the data into categories that make sense according to “relevant interests, commitments, literatures, and/or perspectives” (Loftland et al., 2006, p. 201). Focused coding is more selective and conceptual and builds on the initial coding. Memoing is

another important phase in analyzing data. Memoing refers to the process of writing down ideas (memos) related to coding categories and connections, procedures and experiences. This phase is believed to be fundamental to making sense of large amounts of data.

Although sensitizing concepts gleaned from the research framed this study, it quickly became clear that applying deductive “best practice” codes would restrict the data being collected. Therefore, descriptive coding was used to best capture the reading comprehension strategies, practices and activities as they emerged, both within and across teachers, as the primary goal of descriptive coding is to help the reader “see what you saw”, “know what you know”, and “understand what you think you yourself have understood” (Wolcott, 1994, p. 412). Descriptive coding was also applied to the transcribed interviews to capture influential factors as they emerged from the data.

The full fieldnotes were read and a coding scheme based on the strategies, practices, and activities related to reading comprehension was developed. All the observation fieldnotes were reviewed, but data were only coded if it was related to reading comprehension instruction. Only one code identifying the category of comprehension instruction was assigned to each instructional strategy, practice, or activity observed during each five-minute segment. The only exception was questioning. All eight teachers commonly implemented teacher-generated questions and questions were additionally coded by type – recall or inference. Once all observation data were coded, each five-minute segment was reviewed to identify if reading comprehension instruction was present and if present what types of reading comprehension was implemented during that segment (Zigmond, 2006). At least one reading comprehension code was recorded in 72% ($n=161$) of the total segments ($n=224$) analyzed for this study.

Validity

Throughout the data collection and analysis process, qualitative researchers must ensure that their research is credible and trustworthy. The following strategies are commonly used in qualitative research to establish validity or trustworthiness: triangulation, peer review, and member checking, and clarification of researcher bias (Cresswell, 2008; Glesne, 2006; Mertens, 2005). These procedures were incorporated into this study and are described below.

Triangulation is the process of checking information through multiple sources of evidence to support a theme or conclusion (Mertens, 2005). Triangulation can be achieved through various approaches, including triangulation of methods, sources, analysts, and theories (Patton, 2002). In this study, data were gleaned from various sources and through various methods. Teachers provided demographic data by completing the Teacher and Class Profile. Lesson-specific data were collected through both the Lesson Profile as well as through direct observation of the target class. Finally, information on the factors that influence reading instruction was collected through the teacher interviews. Triangulating these data allowed the researcher to compare and cross-check the consistency of information collected, increasing the credibility and quality of the results (Patton, 2002).

Peer review describes the process of having an external partner reflect and provide input on the work (Glesne, 2006). This process provides the researcher with critical feedback on various aspects of the study and can be helpful in identifying next steps (Mertens, 2005). During this study, reliability of the coding data was established according to the criteria proposed by Miles and Huberman (1994). The researcher trained a fellow graduate student and interrater reliability data were collected on 25% of the total observations and 25% of the total interviews. Training included a discussion of the research questions and the sensitizing concepts that framed the

research. The researcher and the reviewer independently read and coded two randomly selected transcribed observations. Then, the two shared their findings and discussed their codes until they reached a consensus. Next, the researcher and the second auditor independently coded another four randomly selected transcribed observations and met to check for agreement. When disagreements emerged, the researcher and reviewer met and discussed the differences to develop a consensus about the data until interrater agreement reached over 85%. The same procedures were followed for the transcribed interview data. Interrater reliability was calculated by dividing the number of agreements divided by the total number of agreements and disagreements. Interrater agreement for the observation data was 91% (range = 78%-100%) and for the interview data was 88% (range = 79%-100%).

Member checking refers to the process of sharing data with participants to confirm if a description is complete and realistic (Cresswell, 2009) or that they are being accurately represented (Glesne, 2006). These checks can be formal or informal. In this study, the fieldnotes collected during the observation were summarized and shared with each participant during the follow up interview. At this time, participants were asked to confirm that the strategies, practices, and activities were accurately described. Similarly, at the end of each interview, participants were asked to confirm or amend any statements given during the interview. When provided with these opportunities, all participants agreed with the accuracy of both the observation and interview data collected.

Lastly, researcher bias refers to the researcher's own subjectivity as it pertains to the study (Glesne, 2006). Objectivity and subjectivity are controversial topics in qualitative research, often seen as interfering with validity. Qualitative researchers are often identified as "the instrument"; they design the questions and conceptual framework, collect data, and make

sense of the information (Patton, 2002). Additionally, researchers rely on their own understanding of the research to form conclusions (Brantlinger et al., 2005; Odom et al., 2004). Instead of trying to overcome these biases or remain neutral, researchers are encouraged to be “explicit about personal positions, perspectives, and value orientations” (Brantlinger et al., 2005, p. 198). While impossible to eliminate bias, throughout the duration of the study the researcher continuously explored her subjectivity by writing before and after data collection (observations and interviews) (Glesne, 2006). This process promoted awareness and self-reflection of any potential biases.

IV. RESULTS

The following questions guided this study: 1) What reading comprehension instruction strategies, practices, and activities do special education teachers implement in ninth grade special education reading classrooms for students with LD? and 2) What factors do special education teachers state as influencing their use of the observed reading comprehension instruction strategies, practices, and activities? This chapter is divided into three sections. The first section provides a general overview of the reading classes observed to assist in contextualizing the findings, followed by a section on the type of comprehension instruction strategies, practices, and activities observed, and the final section presents the factors influencing comprehension instruction as reported by the teachers.

The Reading Classroom

Over the course of eight weeks, a total of 1120 minutes of reading instruction were observed across eight self-contained reading classrooms in six urban high schools. Class periods averaged 47 minutes (range = 35-65 minutes, $SD = 7.2$) and classes had an average of 7.5 students with disabilities (range = 5-14 students, $SD = 2.9$). Seventy percent of the students were male, 53% of the students were Black and 42% were Hispanic. In the observed classrooms 90% of the students were identified with LD ($M = 7$, $SD = 3.2$). Additionally, other students in these classes were identified with other disabilities, including intellectual disabilities, other health impairments, emotional disturbance, and autism (see Table II for additional class demographics). As identified by teachers, the reading abilities for students in the observed ninth grade classes ranged from non-readers to fifth grade level.

The classrooms in which the observations were conducted also varied. Five of the eight classrooms were smaller in size than typical classrooms found in the schools. In four of the eight

classrooms, students sat around one large table during instruction. In another three classrooms, students sat in traditional student desks. In the remaining class, students sat at small tables in groups of three to four. Three of the teachers taught only separate special education classes and taught in the same room all day. These three classrooms were decorated with classroom expectations, reading posters and anchor charts and had small classroom libraries that students could select books from. The remaining five teachers, however, taught both special education and co-taught classes and moved from room to room throughout the school. Consequently, these five teachers shared their reading classrooms with other teachers. This shared space was evident in the variety of posters and student work that adorned the walls, representing several content areas, including math, social studies, and science.

TABLE II.

Class Demographics

Teacher	Class Size	Male	LD	Black	Hispanic
Angela	6	3	4	6	0
Cathy	7	6	7	1	6
Ethan	5	4	4	1	4
Laura	6	5	6	1	2
John	6	1	6	1	5
Miguel	7	6	7	6	1
Rachel	14	11	14	14	0
Rebecca	9	6	6	8	1

Purpose of reading class. All eight teachers taught the same ninth grade reading course. When teachers were asked to identify the purpose of this reading course, however, responses varied significantly. Three stated the primary focus as improving reading skills and strategies, and another three teachers identified improving students' reading fluency. One teacher indicated that the course was intended to "master the college readiness standards" and another stated that the purpose of the course was to "provide modified reading and writing instruction". Teachers also identified other purposes, including increasing students' reading vocabulary, strengthening students' metacognitive skills, and improving their grammar. Only one teacher additionally stated that the purpose of the reading course was to improve reading comprehension.

Lesson objectives. Just as teachers had a variety of explanations for the purpose of the class, their lesson objectives also varied across the observed lessons. A total of 52 lesson objectives were identified for the 24 observations. Teachers identified a single objective for nine of the lessons; multiple objectives were identified for the remaining 15 lessons. Of the 52 objectives, 73% ($n=38$) were related to assisting students improve their comprehension of reading material. Of these objectives related to reading comprehension, the most frequently identified were vocabulary development ($n=6$), identifying supporting details ($n=6$), character development ($n=5$), and identifying the main idea ($n=5$). Additional comprehension objectives were devoted to previewing the text, making predictions, identifying the purpose, sequencing events, determining the cause and effect, and identifying question types. The remaining 14 objectives did not relate to comprehension instruction and instead focused on grammar, fluency, and writing.

Two teachers maintained the same lesson objectives throughout the study. John, for example, identified the following objectives for all three lessons, explaining that his students

would be able to: “gain appreciable reading fluency and comprehension, gain appreciable vocabulary knowledge, and gain insight on particular details in passages”. Miguel also identified the same objectives for all three of his lessons, stating that his students would be able to: “identify the main idea of a passage, identify supporting details of a passage, and have a better understanding of meanings of words”. Similarly, Ethan identified the same objective for his last two lessons, stating that his students would be able to “determine cause and effect and extract the main idea from a fictional passage”. All other teachers, however, identified different objectives for each of their lessons.

During each observation, notations were made to indicate if the instruction included at least one strategy, practice, and/or activity that would assist students in meeting the lesson objectives outlined by the teacher. In all the lessons there was a part of the instruction that focused on at least one the identified lesson objectives. For example, Angela identified the following objective for her first lesson: “Students will be able to use dialogue to identify character traits”. During this lesson, students read a short passage, selected a character, and highlighted their character’s dialogue. They then selected and analyzed four quotes to determine the best trait to describe their character. In nine of the lessons, although the objectives were worded “students will be able to”, instruction was primarily teacher-centered and students did not actively engage in the strategies, practices, and/or activities related to the lesson objective. For example, five objectives stated that students would be able to identify the main idea of a passage. However, students were never observed being taught how to identify the main idea, nor were they explicitly asked to identify the main idea. Instead, teachers summarized reading sections for students or asked students to recall facts directly from the text. Similarly, six objectives stated that students would be able to increase their vocabulary. However, instruction

during these lessons predominantly consisted of student read aloud. When students stumbled over a word, the teacher stated the correct pronunciation and occasionally provided students with a brief verbal definition or example. Students were not instructed to interact with these vocabulary words beyond listening. Two of the lesson objectives identified in the Lesson Profiles were not incorporated into classroom instruction: one objective related to exploring the author's purpose and the other related to comparing and contrasting characters.

Grouping practices. Teachers employed various grouping practices during instruction. Grouping practices were recorded using momentary time sampling with five-minute segments, thus if a lesson was 50 minutes in length, the grouping practices used in the class were recorded 10 times. The most common grouping structure observed across all the lessons was whole group, representing 66% of the total grouping practices used. Whole group was observed at least once during all 24 lessons. Students were observed working individually on an assignment or activity during 16 of the 24 lessons, accounting for 23% of the grouping practices used. During this time, the teacher typically circulated the room to monitor that students were on task or to assist individual students. The grouping practice observed least was small group (2-3 students), which occurred in only seven lessons, accounting for 11% of the grouping practices used. Many teachers used at least two of the grouping practices during their lessons, often starting and ending with whole group instruction and devoting some time in between to individual or small group or both. All three of the grouping practices were only observed in five of the lessons. One teacher, however, used only whole group instruction for the duration of all three of the observed lessons. During this time, the teacher sat at the table with his six students as they took turns reading different texts aloud. Additionally, whole group instruction was the only grouping practice used by two other teachers during one of their lessons.

Texts. The types of texts read during these lessons also varied. Texts included novels (e.g., *House on Mango Street*, *Call of the Wild*), plays and screenplays (e.g., *Romeo and Juliet*), short stories (e.g., “Thank You, Ma’am”), graphic novels (e.g., *Manga Shakespeare: Romeo and Juliet*), magazines for adolescent readers (e.g., *Reading Advantage Motions Magazine*), and reading passages from standardized tests (e.g. ACT). Of the 24 lessons, narrative texts only were read in 17 and expository texts only were read in three. In two of the lessons, both narrative and expository texts were read. The remaining two lessons focused exclusively on grammar and the text in use was related to the grammar activity. In one lesson students were provided with worksheets; in the other students were given a printed copy of a PowerPoint presentation.

Reading Comprehension Instruction

Although all the lessons observed included the reading of text, no reading comprehension strategies, practices, and activities were observed in three of the lessons. In two of these lessons the instruction was focused exclusively on developing students’ knowledge of grammar; during one lesson, students rotated through five stations and worked on a different grammar worksheet at each station and during the other lesson, students competed in a game of Grammar Jeopardy. In the third lesson, students worked on writing activities not related to a reading text. Therefore, since only 88% ($n=21$) of the lessons observed incorporated any type of reading comprehension strategy, practice, and/or activity, the findings in this section are based solely on the lessons where comprehension instruction was observed in order to gain a clearer understanding of the type of reading comprehension instruction that was utilized by teachers.

Reading comprehension instruction strategies, practices, and activities were observed being implemented at least once during 83% of the five-minute segments across all 21 lessons. Teachers were observed using 13 different types of reading comprehension strategies, practices,

and activities including reading aloud, questioning, and activating prior knowledge (see Table III for categories and descriptions). During the remaining 17% of the segments, however, reading comprehension instruction was not observed. Instead, this class time was devoted to transitioning, behavior management, and non-comprehension related assignments. All observed practices fit into these 13 categories with no other comprehension practices observed. Figure 1 presents a breakdown of the frequency of each reading comprehension strategy, practice, and activity. These percentages reflect the frequency of each category of the total reading comprehension instruction observed during the 161 segments across all 21 lessons in which comprehension instruction was implemented. Reading text aloud (14% students reading; 12% teacher reading) was the most frequently observed practice and comprised 26% of the total comprehension instructional practices observed. Independent seatwork (16%) and questioning (13%) were also common practices. The practice of activating prior knowledge represented 10% of the reading comprehension instruction. Other practices observed included using graphic organizers, summarizing, and annotating. A description and classroom examples of these categories follow.

Reading aloud. Reading text aloud represented 26% of the comprehension instruction observed, making it the practice that was observed the most during comprehension instruction. Both the teacher and students were observed reading aloud. Student read aloud accounted for 14% of the comprehension instruction observed. Six teachers used the practice and individually selected students to read aloud in 11 of the 21 lessons. During student read aloud, all students and the teacher had access to the same text, and one student read aloud to the whole class while other students either followed along in the text or engaged in other non-instructional activities including sleeping, talking with each other, and doing work for other classes, often times with

TABLE III.

Reading Comprehension Instruction Categories

Categories	Description
Activating prior knowledge	The teacher instructs students to draw on their own experience or knowledge of a topic/situation.
Annotating	The teacher instructs students to actively engage with written text while reading by underlining, highlighting, circling, and taking notes.
Graphic organizers	The teacher instructs students to organize concepts from text into a graphic representation.
Independent seatwork	The teacher provides students with reading comprehension passages and/or worksheets to complete independently.
Predicting	The teacher instructs students to make predictions about what will happen in the text or to determine the accuracy of the predictions made.
Previewing	The teacher instructs students to preview the text features before reading (includes previewing text features such as titles, headings, pictures, captions as well as vocabulary).
Question types	The teacher instructs students on how to identify different question types.
Questioning	The teacher generates questions during or after reading specifically related to the content of text.
Setting a purpose	The teacher sets a purpose for reading the text.
Story structure	The teacher provides instruction on plot, sequencing, characters, and events.
Student read aloud	The teacher instructs students to read the text aloud (one at a time).
Summarizing	The teacher summarizes passages or identifies the most important concepts or events in a text.
Teacher read aloud	The teacher reads the text aloud.

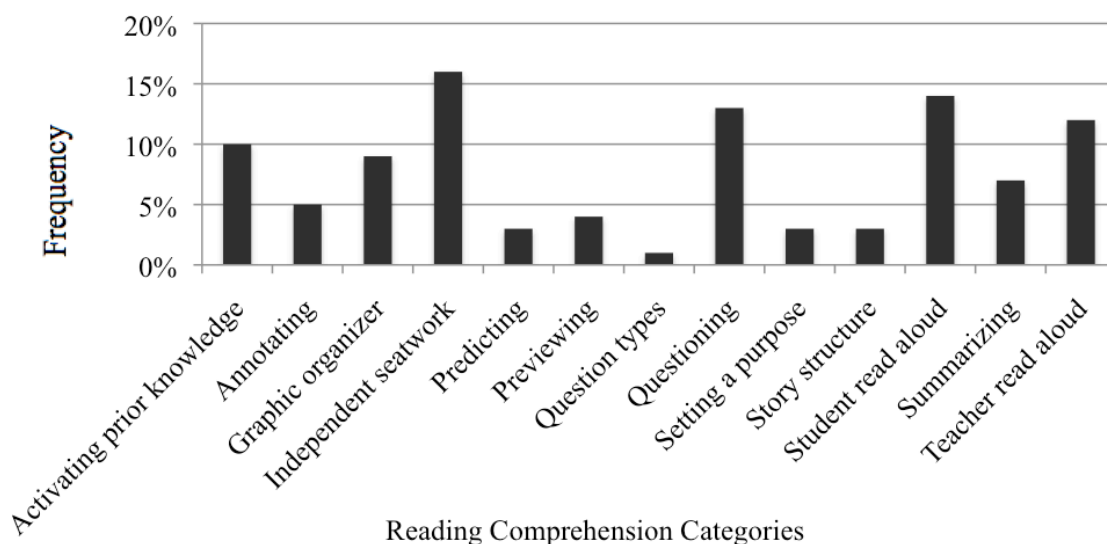


Figure 1. Reading comprehension strategies, practices, and activities observed across 21 lessons.

their books closed. Students read aloud until the teacher selected another reader or interrupted the reader to ask questions or to summarize the text.

Student read aloud was prominently featured in all three of John and Miguel's lessons. During these six lessons, John and Miguel sat at the table with their five to seven students and called on individual students to take turns reading aloud from their novels. Students often read for pages at a time before the teacher identified the next reader or stopped to summarize or ask questions about the text. Students in John's class, in particular, experienced significant difficulty with reading fluency and decoding the text. During his first lesson, for example, John called on a student to read aloud from *The Call of the Wild*. Although the student shook his head no, John encouraged him to read, "Go on. You can do it." The student began reading. It was slow and choppy, omitting and mispronouncing several words within the first three lines, including trail,

bristling, led, and straight. Each time, John supplied the correct word. The student shook his head back and forth, suggesting that he did not want to continue reading. Again, John instructed him to continue. Hesitant, the student read another line, omitting the words toward and Thornton. The student told John that he could not read the book and that it was hard for him to read. John then called on another student to pick up from there. The new student began reading and within one paragraph mispronounced squirrels, suddenly, thicket, Nig, dead, arrow, stuck, dogs, thrashing, and death (Observation 1, 11/23/11). Students were not observed reading aloud in Rachel and Ethan's classrooms.

Teachers also participated in reading aloud, accounting for 12% of the reading comprehension instruction observed. This practice was observed in 17 lessons and all eight teachers were observed reading aloud at least once. Most of the time, both teachers and students had the text in front of them. However, during three observations, only the teacher had access to the text. Additionally, while teachers read text aloud, students were not typically accountable for participating in the lessons and engaged in the same behaviors as when students read aloud. Rachel, for example, spent 15 minutes of one lesson reading aloud the first chapter of *Schooled* to the whole class (Observation 1, 12/20/11). Her students did not have access to the text while she read and were instructed only to listen to the story. While Rachel read aloud, four students had their heads on their desks. When she finished reading the chapter, students were prompted to record three things they liked or disliked. Similarly, Miguel concluded two of his lessons by reading a chapter aloud from *Freedom: Credos from the Road* by Sonny Barger, a founding member of the Hells Angels motorcycle club (Observation 1, 11/21/11 and Observation 3, 12/5/12). During this time, Miguel was the only one with a book and his students were asked to just listen as he read aloud. Only twice during the study did a teacher explicitly state what

students should be doing while the teacher read aloud. Before reading aloud *To Kill a Mockingbird*, Ethan told his students: “Remember, we’re following along in our books. Follow along with your ears and eyes. We’ll stop periodically and talk about it” (Observation 1, 12/21/11). Similarly, Rebecca explained her expectations while reading:

Rebecca: Ok. Books open. I want everyone on chapter one. What do I expect you to be doing while I am reading?

One student states, “following along”. Another responds, “answering questions”.

Rebecca: Good. I want you listening and writing. (Observation 1, 12/19/11)

Independent seatwork. Another common reading comprehension practice that teachers implemented was to assign independent reading comprehension seatwork. Independent seatwork represented 16% of the reading comprehension instruction; it was assigned by five teachers and observed in 12 lessons. Independent seatwork described the practice of providing students with reading comprehension passages and/or worksheets to complete independently. Some of these assignments asked students questions about the text, and included open-ended and multiple-choice questions. Rebecca, John, and Miguel assigned independent seatwork in all three of their lessons. John’s students, for example, completed a worksheet following a read aloud of *Call of the Wild* and “Thank You, Ma’am”, in which students were asked to write about the concern, audience, purpose, tone, main idea, and supporting details (Observation 1, 11/23/11 and Observation 2, 12/1/11). Another form of independent seatwork was observed in Ethan’s class where students worked independently on computers. They accessed the *Achieve 3000* program and completed a pre-assessment, read a short passage about Dred Scott, and answered several multiple-choice questions about the passage. Additionally, students were prompted to provide a written response and complete a word search. During this lesson, Ethan circulated the classroom and assisted students as needed. Although this program is designed to provide students with

differentiated passages based on their reading level, all five students were provided with the same passage and the same questions (Observation 2, 1/13/12).

The function of independent seatwork appeared to be a means of checking students' comprehension of what was read. However, this practice was typically observed toward the end of the lesson and often finished when the bell rang, signaling the end of class. Teachers either collected the worksheets or asked students to place their work in their binders. Rebecca was the only teacher who asked her students to share out after completing independent seatwork: "Ok. Let's stop here. Look at your responses. Discuss with your group mates what you have. Share your responses. You can even look back in the book" (Observation 1, 12/19/11).

Questioning. Teacher questioning was another common practice that was naturally integrated into both teacher read aloud and student read aloud. Questioning described teacher-generated questions that were asked during or after reading and that related specifically to the content of the text being read. Questioning represented 13% of the reading comprehension instruction. Similar to teacher read aloud, the practice of questioning was used by all eight teachers and observed in 16 lessons. All questions asked students either to recall information or to make inferences (see Table IV). Of these questions, 57% were devoted to recall. Recall questions were low-level and asked students to recall factual and literal information directly from the text. All eight teachers asked recall questions. Students were frequently asked recall questions while the teacher or students were reading aloud such as "Who is this about, a boy or a girl?" "What time of day is it?" and "What happened at the end?" Similarly, questions prompting students to recall information were also asked after reading. John, for example, asked the following recall questions after reading *Last of the Mohicans*: "What year did this story take place?" "Who are Chingacook and Uncas?" "Who are Cora and Alice?" and "What is the name

TABLE IV.

Teacher Questioning Categories

Category	Description
Inference	The teacher asks students to draw conclusions by relating textual evidence to the reader's prior knowledge.
Recall	The teacher asks students to recall information from the text.

of the nation that the Indians are fighting?" (Observation 2, 12/1/11).

The remaining 43% of the questioning required students to make inferences. Seven teachers were observed asking students to make inferences and this practice occurred during 11 lessons. Inference questions observed are higher-level questions that ask students to draw conclusions by relating textual evidence to the reader's prior knowledge. Examples of inference questions asked included "How do you think the boys feel about the flashlight?" "What does this tell us about the character's interests?" and "What do you think is important to her?" Angela devoted the majority of her first lesson to asking students to make inferences about characters. During this lesson, students read a scene from the screenplay of "The Breakfast Club". After selecting a character and highlighting all of their lines from the dialogue, students selected four quotes and were prompted to identify character traits to describe each quote (Observation 1, 12/8/11). Throughout the lesson, Angela asked her students questions such as "What does this statement tell us about Andrew?" "Why would he say this to Bender" "Based on Brian saying that he's in the math and physics club, what can we infer?" and "What can we infer about him using all of those big vocabulary words?"

Teacher-generated questions seemed to serve multiple purposes, including engaging students in the lesson, moving the discussion forward, promoting higher-level thinking, and assessing student comprehension. Student responses to both recall and inference questions may have provided the teachers with some insight into their level of reading comprehension. Rebecca's students, for example, were able to successfully answer her questions on an article about Greek gods. Each time Rebecca asked the following questions several students raised their hands eager to answer:

Rebecca: So, who is Uranus' youngest son?

Student 1: Cronus.

Rebecca: Who's Rhea?

Student 2: Cronus' wife.

Rebecca: Who was Rhea's fifth baby?

Student 3: Zeus.

Rebecca: What did Zeus make Cronus do when he grew up?

Student 4: Spit out the other children. (Observation 2, 1/9/12)

Similarly, Cathy asked inference questions that her students answered successfully:

Cathy: Based on what we have learned, what type of attitude do you think he has?

Student 1: A positive attitude.

Cathy: Yes! And what can infer that the author wants us to take away from this story?

Student 2: Don't give up. Don't stop believing. (Observation 12/6/11)

Not all questioning was as effective; however, as illustrated by the following example which occurred immediately after John and his students finished a reading of *The Call of the Wild*:

John: So, what happened? Who did Buck kill?

Student: Thornton?

John: No, not Thornton.

Student: The wolves?

John: No. Try again.

Student: The Indians?

John: Yes! He killed the Indians. (Observation 1, 11/23/11)

This interaction suggested that the student was guessing rather than demonstrating a genuine understanding of the text. Similarly, students were observed responding to questions with clarifying questions, again suggesting a lack of comprehension of text or perhaps of the question itself. The following interaction occurred while reading a scene from *Romeo and Juliet*:

Laura: So, what happened right after the party?

Student: The fight?

Laura: No! We have to get on the same page! (Observation 1, 12/5/11)

When students did not respond or provided incorrect responses to teacher-generated questions, teachers also responded in a variety of ways. Four of the teachers simply gave students the answer or just moved on. In the following cases, students did not respond to teacher-generated questions. For example, a student in Miguel's class had just finished reading a paragraph from a chapter of *Education of a Felon*, when Miguel engaged in the following questioning and answering:

Miguel: Ok. So is anything going on right here? What happened when the dad got into the car? (no response) Ok. Here's what happened.

Miguel proceeds to summarize the main events from the chapter. (Observation 1, 11/21/11)

Similarly, John was also observed answering his own question:

John: Why is the author writing this? (no response) Ok. Well, I thought it was to persuade, show a cause and effect, and to illustrate. (Observation 1, 11/23/11)

At other times, students provided incorrect responses. For example, Cathy and her students had just finished reading an article titled “When Nothing Can Stop You” about artists with physical disabilities, when Cathy asked the following:

Cathy: So, what do you guys think about this? Brown only has use of his what?
Student: His painting.

Cathy: Painting? No. He only has use of his foot. (Observation 2, 12/6/11)

Occasionally, when students did not respond at all, the teacher responded by asking more questions, as illustrated again by Cathy later in that same lesson.

Cathy: Ok. We have time for one comprehension question. What did Chuck Close do to overcome his physical challenge? (no response) What was his challenge? (no response) What about Christy Brown? (no response) What did he do? (no response) How did he get around only using his left foot? (no response) What did he do, specifically? (no response) (Observation 2, 12/6/11)

Another way that teachers responded when students did not answer was to just move on to the next reading or activity:

Ethan: OK. So we’ve talked a little about the 30’s. How did people respond when they didn’t like people? (no response) What was that called? (no response) Do you remember? (no response) Do you remember the pictures? (no response) We talked about lynching.

Ethan resumes the audio book. (Observation 1, 12/21/11)

Together, these examples demonstrate the types of questions that teachers asked during and after reading instruction, as well as the student responses that they generated. Moreover, these cases illustrate some of the challenges of relying so heavily on teacher-generated questioning to gauge students’ comprehension of what was read.

Activating prior knowledge. In addition to questioning, all teachers implemented strategies, practices, and activities to activate students' prior knowledge. The practice of activating prior knowledge accounted for 10% of the reading comprehension instruction observed. This practice occurred when the teacher instructed students to draw on their own experience or knowledge of a topic or situation. Activities designed to activate students' prior knowledge were implemented at the beginning of lessons and were often labeled as a "Bell Ringer" or "Do Now". These activities were typically short (5-10 minutes in length) and prompted students to relate current learning to what they already know. Sometimes teachers activated students' prior knowledge by having them recall previously learned material. Examples of these prompts included "What do we know so far about [topic]?" "What did you think of the story yesterday?" "What was the most important event in chapter 16?" At other times, teachers engaged students in the lesson by having them make a personal connection with what they were reading. For example, before starting a new book in the Bluford series, Rachel held the book up and asked, "How many of you have read this book?" "What do you know about these books?" and "How do you think these characters are like us?" (Observation 1, 12/20/11).

Graphic organizers. The use of graphic organizers comprised 9% of the reading comprehension instruction observed. Graphic organizers were used by four of the teachers and observed in seven lessons. During these lessons, students were given an average of 20 minutes to complete their graphic organizers. Graphic organizers assisted students in organizing concepts from text into a graphic representation. A total of six different graphic organizers were used. Types of graphic organizers used included T-charts, plot diagrams, character charts, and prediction charts. In three of the lessons, the graphic organizers used were pre-made and students completed them before, during, and after reading. In the only lesson in which an

activity focused on vocabulary, Cathy instructed her students to complete a graphic organizer on their own titled “Building Vocabulary: Predictions” from the Reading Advantage Student Journal. This organizer required students to select vocabulary words, predict definitions, and identify how the words were actually used in the text (Observation 2, 12/6/11). In the remaining four lessons, the teacher instructed students to create their own graphic organizer. Angela, for example, provided her students with a large sheet of construction paper and guided them through the process of folding it to make six squares and writing the following labels in each of the squares: character traits, speech, thoughts, effect on others, actions, and looks. In pairs, students sorted quotes from specific characters into each of the categories. Finally, students used the information that they had organized to identify character traits (Observation 2, 12/15/11). Ethan was the only teacher whose students were observed using the same graphic organizer across two lessons.

Summarizing. Summarizing was another reading comprehension practice implemented by seven of the teachers and observed in 13 lessons. This practice represented 7% of the reading comprehension instruction. Summarizing occurred when the teacher provided students with a verbal overview of a reading passage or identified the most important concepts or events in a text. Students were not explicitly asked to provide a summary of the text. However, teachers regularly summarized the text for students during reading with interjections such as “Ok. Here’s what happened...” and “What he’s saying is this...” During Ethan’s first observation, he spent part of the lesson playing *To Kill a Mockingbird* on audio, stopping it seven times to summarize the scene or highlight important events for students, including identifying new characters, explaining what Atticus is afraid of, describing why Atticus told his children not to worry, and summarizing Scout’s concern that a mob will hurt her father (Observation 1, 12/21/11).

Throughout this entire lesson, students were never asked to summarize their own understanding of the story or events. This practice was observed across all lessons; teachers summarized the text but did not ask students to identify the main idea or provide a summary.

Annotating. Four teachers engaged students in the strategy of annotating text. This practice accounted for 5% of the reading comprehension instruction and was observed in six lessons. Annotating described when the teacher instructed students to actively engage with written text while reading by underlining, highlighting, circling, and taking notes. This process was used to encourage students to monitor their own comprehension as they read. All annotating occurred during student or teacher read aloud. In two of the lessons students were instructed to underline, in another two lessons students were prompted to highlight, and in the remaining two lessons students were prompted to take notes while text was read aloud. Teachers instructed students to underline “interesting parts” and “confusing parts” and highlight “phrases, words, sentences that are especially entertaining to you, something you identify with”. Angela modeled annotating as the class read aloud a chapter from *The House on Mango Street*:

Student reads the first paragraph aloud.

Angela: Ok, what do we know about Marin so far?

One student responds that she’s getting married. Another states that her boyfriend doesn’t have a job. As students continue to respond, Angela highlights phrases from the text on her laptop and projects it onto the wall. A new student is called on to read the second paragraph. (Observation 2, 12/15/11)

Rebecca made this process more explicit by explaining the reason for annotating text and modeling the process:

Rebecca: Ok. Listen up. You need your red pencils. When I read something I need to remember, I underline it. In the first paragraph, I’m gonna tell you what I think is important and what to underline.

Rebecca calls on student to read paragraph.

Rebecca: Ok. Let's underline the second sentence because it's important and tells us what happened to his children.

Students underline the sentence. (Observation 2, 1/9/12)

Miguel engaged his students in annotating by taking notes as new characters were introduced in *Monster*:

Miguel: There are a million characters all at once. So, we're gonna use index cards to keep track of the characters.

Miguel gives each student a plain index card.

Miguel: On this note card, we're gonna keep track of the characters and who they are.

A student reads a paragraph. Miguel stands up and writes on the chalkboard "Steve Harmon – monster, narrator" and instructs students to record this on their index cards. (Observation 2, 11/28/11)

Other reading comprehension instruction observed. Other types of reading comprehension instruction were observed in the study. This instruction included strategies, practices, and activities that focused on previewing, predicting, story structure, setting a purpose, and question types. Together, these other types of instruction accounted for 14% of the reading comprehension observed with no category representing more than 4% of the instruction. Previewing was observed in four lessons and was employed by three teachers. This practice instructed students to preview specific features of the text before reading. Cathy, for example, instructed her students to do the following before reading a new article from their Reading Advantage magazine: "I want you to flip through the five pages of this next story. Take a close look at the bold and underlined vocabulary, pictures, title, and any other clues that might tell us what this story is about" (Observation 2, 12/6/11).

Predicting was another practice used to engage students in the text before reading. Four teachers were observed prompting students to make predictions about what they thought would

happen, asking questions such as “What do you think this story will be about?” and “What do you think will happen next?” At the end of their lessons, both Angela and Cathy prompted students to locate evidence to determine the accuracy of the predictions that they made.

Story structure, instruction on plot, sequencing, characters, and events, was taught by four teachers and observed in five lessons. Angela, Miguel, and Ethan instructed students to identify character traits based on evidence in the text. Ethan’s students selected characters from *To Kill a Mockingbird* and used the text to describe the character’s physical features, personality traits, and heroic qualities (Observation 1, 12/21/11) while Laura’s students referenced a large plot diagram taped to the wall and sequenced scenes from *Romeo and Juliet* (Observation 1, 12/5/11).

The practice of setting a purpose before reading occurred in eight lessons and was implemented by five teachers. Setting a purpose described when teachers explained the reason for reading. Three of the teachers identified test preparation as the primary purpose for reading. Rebecca, for example, explicitly told her students, “Our purpose in reading this is to prepare for tests” (Observation 2, 1/9/12) and Angela explained, “The purpose in reading this text is to become familiar with the format for when you take the test again” (Observation 3, 1/12/12). Other lessons suggested that reading aloud was just a chore that needed to get done. Before reading aloud *Last of the Mohicans*, for example, John told his class, “Ok. Let’s go with some pace. I wanna read as much as we can” and “Let’s see how far we can go” (Observation 2, 12/1/11).

In only one lesson did a teacher explicitly discuss question types. During her lesson, Angela explained to her students the difference between “Right There” questions and “Think and Search” questions (Observation 3, 1/12/12). Angela provided her students with a hint for sorting

the questions, reminding them that “Right There” questions start with “according to the passage” and “Think and Search” questions start with “based on the passage”. Students cut out ten questions from a practice Explore test and sorted them according to these two question types. The questions were then glued onto a T-chart. The teacher explained that this chart would be used the following day to assist students in answering the questions.

Lesson alignment. Teachers were asked prior to each lesson and following each observation to identify any reading comprehension strategies, practices, and activities they planned to implement or implemented in their lessons. In most cases, teacher responses matched the observed practices. All three of Angela’s lessons aligned to the practices she identified, and she reported the following: “I think the summarizing information and asking clarifying questions, basically. Shared reading, read aloud” (Interview 1, 12/8/11), “Highlighting and graphic organizers” (Interview 2, 12/15/11), and “Well like, predicting, summarizing, questioning. I’m trying to think of all the different strategies. Yeah, those are the ones that come to mind” (Interview 3, 1/12/12). Rachel’s responses also aligned to the instruction observed. For her second lesson, Rachel explained that no reading comprehension instruction would be implemented. During her lesson, students spent the majority of class time engaged in independent seatwork. When asked to confirm if she had implemented any practices related to reading comprehension instruction, Rachel candidly replied, “Aside from the actual questions on the worksheet, no” (Interview 2, 1/10/12).

Three teachers, however, identified reading comprehension strategies to be included in their lessons, but were not observed implementing them during instruction. Ethan, for example, stated that his students would be able to use compare/contrast words to analyze two different characters in his first lesson. However, Ethan’s instruction did not focus on this objective during

the first lesson. Similarly, Miguel identified that his first lesson would focus on using context clues for vocabulary and using critical reading skills to derive understanding of readings. However, these activities were not observed during this lesson. When asked to confirm the use of these practices in his post-observation interview, Miguel responded, “I don’t think so, except for maybe just going back and recapping what was read, so simple comprehension recall, just going back and summarizing sections to make sure that they are a) paying attention and b) understanding” (Interview 1, 11/21/11).

On the other hand, some teachers were observed implementing various types of reading comprehension instruction during their lessons that they did not explicitly identify before or after their lesson. For example, John regularly implemented questioning, but never alluded to it as a reading comprehension strategy or practice. Likewise, Ethan began each lesson with a bell ringer to activate his students’ prior knowledge, yet did not highlight this practice as a reading comprehension activity. These responses may suggest that teachers naturally embed these practices into their reading instruction and do not recognize them explicitly as “reading comprehension strategies, practices, and activities”.

Student performance. Additionally, during each post-observation interview, teachers were reminded of their lesson objectives and asked if they thought their students met the objectives during the given lesson. Although actual responses varied, teachers responded favorably across all interviews. Many teachers expressed confidence in their students’ performance. John, for example, responded, “Absolutely, if I may be very, very bold” (Interview 3, 12/8/11) and Rebecca replied, “Yes, my objective was prediction and they definitely were predicting” (Interview 2, 1/12/12). Cathy, also pleased with her students’ progress, elaborated in the following response:

I do. I think that they learned what I wanted them to learn based on their responses and based on the fact that when we were reading, I would stop and get their feedback, kind of check for comprehension, and they were following along, they understood what was going on. So, based on their actual verbal responses I think that they were able to achieve the two objectives that I set for today's lesson. (Interview 2, 12/6/11)

Miguel also responded positively about one of his objectives, but expressed some doubt if his students had developed a better understanding of meaning of words as a result of his lesson: "I guess I really don't know if they're actually learning the words, but I'm happy if they can identify words they don't know so I can give them a fast definition. So, that's how I tackle meaning of words (Interview 1, 11/21/11). Other statements revealed a concern over students' ability to independently demonstrate their learning. Ethan, for example, responded, "I know all the kids that I checked got sequencing. It's whether or not they can do that for every chapter" (Interview 1, 12/21/11). Laura, also pleased, expressed a similar concern: "I'm not so sure that they practiced the fluency because they're not willing to do the reading, unless you're standing right over the top of them. But overall, I thought that it worked out pretty well" (Interview 3, 12/20/11).

Summary of reading comprehension instruction. Analysis of the observation data reveals that teachers used a number of strategies, practices, and activities to support students in comprehending written text (see Table V). All eight teachers implemented teacher read aloud, questioning, and activating prior knowledge. Other practices implemented by a majority of the teachers in this study included summarizing, student read aloud, independent seatwork, and setting a purpose. In any given lesson, the number of practices, activities and/or strategies used varied from one to ten with an average of six practices observed per lesson ($SD = 2.4$). Nonetheless, the number of strategies, practices, and activities implemented did not appear to correlate with student engagement or improved comprehension. Although teachers exposed

TABLE V.

Reading Comprehension Instruction Categories Observed at Least Once

Categories	<u>Teachers</u>		<u>Lessons</u>	
	(<i>n</i> = 8)	<i>Percentage</i>	(<i>n</i> = 21)	<i>Percentage</i>
Activating prior knowledge	8	100	14	67
Annotating	4	50	6	29
Graphic organizers	4	50	7	33
Independent seatwork	5	63	12	57
Predicting	4	50	6	29
Previewing	3	38	4	19
Question types	1	13	1	5
Questioning	8	100	16	76
Setting a purpose	5	63	8	38
Story structure	4	50	5	24
Student read aloud	6	75	11	52
Summarizing	7	88	13	62
Teacher read aloud	8	100	17	81

students to many of the strategies and practices used by good readers to actively monitor their reading comprehension, the actual instruction on how and when to apply these comprehension strategies was never made explicit to students. Moreover, the reading comprehension observed was primarily teacher-centered, undifferentiated, and employed a whole-class model.

Factors that Influence Reading Comprehension Instruction

After each of the 24 lesson observations, teachers participated in an interview with the researcher to describe the factors that influenced their implementation of reading comprehension

instruction. An interview guide was used for each interview and teachers were generally very eager to discuss their lessons and elaborate on their instructional practices. A complete list of the interview categories and descriptions are shown in Table VI. In an effort to best present this data, these influential factors have been organized according to three broader categories: student, school, and personal.

Student Factors

Factors that special education teachers often identified as influencing their reading comprehension instruction fell under the category of student. Teachers described how their use of strategies, practices, and activities were influenced by student characteristics, including their present level of performance, engagement, and IEPs. Descriptions of these student-based influences and examples of each follow.

Present level of performance. All eight teachers identified their students' present level of performance as influencing their instructional practices. Present level of performance describes teachers' knowledge and understanding of their students' strengths (what they can do) and unique needs (e.g. academic, social, emotional, learning style). As Laura explained, "I chose this text because they can do this; this is at their level" (Interview 3, 12/20/11). Rebecca also spoke about the importance of targeting her students' strengths and providing them with appropriate texts and activities that they can do:

I selected it at that level so that the majority of the class would be able to read it independently, and the same with the reading selection. It was something that I thought the majority would be comfortable with and be able to handle. (Interview 2, 1/12/12)

Additionally, Cathy, spoke directly about providing her students with instruction based on their specific needs as readers: "A lot of my instruction is driven by what the students show me they can do already in areas that I feel like, as good readers, they should be working on (Interview 1,

TABLE VI.

Factors that influence instruction

Category	Code	Description of Code
Personal	Experience	Teachers base instructional decisions on something previously observed or implemented.
	Interests	Teachers state that their own personal preference or interest drives their instruction.
	Preparation	Teachers explain their level of preparation to teach the reading course.
	Defining reading comprehension instruction	Teachers discuss their own definition or description of what reading comprehension instruction is or includes.
School	Alignment to general education	Teachers identify access or alignment to the general education curriculum or classroom.
	Collaboration	Teachers work or plan with other special or general educators.
	Directives	Teachers describe policies or procedures mandated by a department or by administration.
	Learning standards	Teachers state that instruction is driven by state or national learning standards.
	Test preparation	Teachers identify the importance of preparing students for an assessment (formative or summative).
Student	Engagement	Teachers describe the importance of what students are interested in and can relate to or what will hold their attention.
	IEPs	Teachers discuss the importance of student IEPs in planning and implementing instruction.
	Present level of performance	Teachers describe their knowledge and understanding of her students' strengths (what they can do) and unique needs (academic, social, emotional, learning style, etc).

11/29/11). Later in the interview, Cathy elaborated on this process, explaining:

When I first started teaching the reading class I had the kids fill out a questionnaire about reading: “What did you think about reading?” “What kind of reader do they think you are?” “Why don’t you like reading?” It was a bunch of different questions. So that drives my instruction as well. (Interview 1, 11/29/11)

These statements suggest that teachers made instructional decisions that were intentional and based on what they believed their students can do. Some responses, however, revealed that instruction was dependent more so on what students could not do. For example, when asked why she continued to model the strategy of annotation instead of releasing the responsibility to her students, Angela explained, “The reason I do it that way is I’ve noticed, like, it’s *really* hard for them to select out what’s important, either they select everything or nothing. So I don’t want to completely do it for them but...” (Interview 2, 12/15/11). Similarly, John was asked about why he continued to model how to complete the same graphic organizer two weeks in a row, responding, “They still don’t have the strength to go forth and complete it individually. There almost certainly must always be a lead. There must be lead statements to help them understand a little bit more” (Interview 3, 12/8/11).

Many teachers also spoke about the importance of targeting students’ unique needs, meeting them “where they’re at” and bringing instruction “down to their level”. Ethan, for example, described his instruction as responding to the immediate needs of his students, as evidenced by their academic performance: “My plans can totally change if during the bell ringer they’re not getting what happened the previous day (Interview 1, 12/21/11). Rachel also discussed her students’ unique needs, highlighting the influence that their learning styles had on her instruction:

A lot of times I try to find material that is related to the topic but at grade level for my students. And then I try to infuse activities and movement because my students like to get up, whereas in a gen Ed classroom they would not be able to do that. (Rachel, Interview 1, 12/20/11)

Interestingly, Rachel and Laura were the only two teachers who spoke explicitly about their students' behavior in relation to their instruction. Rachel stated:

I have to consider my students' behavior, first and foremost, because if I give them work that's too hard I'm gonna get an adverse effect versus if I give them work that's challenging, that they're able to do it in a way, like a fun way, with a basketball or something like that, then it motivates them to want to participate more, and I get more of a participation from the students (Interview 3, 1/17/12)

Laura also identified behavior as a factor that influenced her instruction, explaining, "I spend a lot of time thinking about their emotional balance, I guess, and how it relates to what it is that I'm doing...I have to look at their behavior because there's a lot of behavior minefields in here (Laura, Interview 12/20/11).

Engagement. Student engagement was also identified by seven of the teachers as influencing their instruction. Specifically, teachers discussed the importance of selecting and implementing strategies, practices, and activities that would hold students' attention or that students would be interested in or would relate to. Two teachers described the importance of designing activities for students that would "grab their attention" and "engage them". When explicitly asked to identify the factors that drive their instructional decisions each day, Laura replied, "whether or not I can keep them engaged the whole period" (Interview 3, 12/20/11). Additionally, student interests influenced instruction. For example, in discussing activities in which students were asked to make predictions about the text, Rebecca reported that it was a priority to "find material that is relevant, that is high interest" (Interview 1, 12/19/11). Similarly, Cathy identified the importance of student interest, explaining that her instruction is influenced by "whether or not they would actually enjoy reading this text" (Interview 1, 11/29/11).

Several teachers also shared the importance of designing instruction that students could connect to or that was relevant to their students' lives. Laura, for example, explained that she incorporated activities using the graphic novel version of *Romeo and Juliet* "to see if they could, you know, connect with the story better" (Interview 1, 12/5/11). Likewise, Angela stated that her text selection was primarily influenced by "what students can relate to" and "identify with" (Interview 1, 12/8/11). Rachel described a similar thinking for selecting text: "I feel like finding material that my students can relate to makes reading a little bit more enjoyable. It's all their demographics, their neighborhood, their age group, the issues that they face in the classroom, having LD" (Interview 1, 12/20/11). John also identified the need to connect instruction with his students' lives. When asked to describe his decision to have students read aloud, John responded, "Of course, with these young people, having the deficits that they have, it must be laid out or it must be a lesson that must be presented to them where they are able to put themselves in it and have some type of feeling for it" (Interview 2, 12/1/11).

IEPs. Additionally, teachers explained the influence that student IEPs had on their reading comprehension instruction. Interestingly, Cathy was the only teacher to mention IEPs without being explicitly asked about them. In her first interview, Cathy explained the following:

In terms of teaching students with LD, what drives my reading instruction, in addition to their performance, is what did I see in their IEP, what is it their goals are, what they're supposed to be working towards, and what do they need in terms of accommodations and modifications. That influences how I plan and how I lead instruction (Interview 1, 11/29/11)

Here, Cathy identified the information in students' IEPs as something she needed to consider in planning and implementing reading instruction. Although all eight of the teachers in the study were special educators and all of the students in the target reading classes had identified disabilities and IEPs, IEPs were not mentioned by any other teacher during the first two

interviews. As a result, during the final interview teachers were specifically asked about the influence of the IEP on instruction. This question was asked to better understand if IEPs influenced reading comprehension instruction in these special education classrooms.

After prompting, five of the eight teachers did acknowledge that IEPs influenced their instruction to some degree. Rachel, for example, explained that IEPs “kind of drive the instruction because I have to accommodate and modify for all of the students” (Interview 3, 1/17/12) while Laura explained, “I look at what their goals are and where they’re supposed to be and 90% of the time their goals say that they’re lacking in comprehension. And so I find myself spending a lot of time so that I can satisfy those goals” (Interview 3, 12/20/11). Similarly, in the following excerpt, John describes how IEPs influenced his instruction:

Being with the young people I do have a chance to look over some of the IEPs from their previous schools to certain degrees, and at least have an idea of what they have as far as their shortcomings, you know, what it is they are deficient in, and then at least go from there. I try to work on those deficits so that they will become strengths, you know, attack the deficits. (Interview 3, 12/8/11)

The remaining three teachers, however, reported that student IEPs did not significantly influence their instruction. Rebecca, for example, explained, “I really try to pay more attention to the needs that I see in front of me and what I’ve assessed and what my colleagues have assessed, so that’s a tough question (Interview 3, 1/17/12). When asked how he used IEPs to drive his instruction, Miguel had a similar, but more direct response: “I don’t. I’ve not read one of these kids’ IEPs, not for the instructional side... to me that document does not hold very much value at all (Interview 12/5/12). Angela, on the other hand, responded by explaining her process for writing her students’ IEP goals, “So I guess I base my IEP goals more on what we’re doing in the classroom then vice versa. I mean I don’t know if that’s what we’re supposed to be doing but that’s how I go at it (Interview 3, 1/12/12).

School Factors

In addition to the influence that personal factors had on reading comprehension instruction, teachers also described how various school-related factors affected their practices. These factors included test preparation, learning standards, collaboration with others, school-initiated directives, and alignment to general education. Descriptions of these influential factors and examples of each follow.

Test preparation. Six teachers identified test preparation as influencing their reading comprehension instruction. When asked why she instructed students to read passages and complete worksheets independently, Rachel explained, “In a week they’ll take their final exam and they’re always exposed to reading passages that they’ve never seen before, so giving them something they’ve never seen before is kind of a prep tool” (Interview 2, 1/10/12). Rebecca also discussed test preparation, explaining the reason that her second lesson focused on “The Three Ps” (Purpose, Preview, and Prediction) was so that “they’re better prepared to take some of the tests that are coming up in the school year” (Interview 2, 1/12/12). Additionally, when asked what influenced his use of inference questions, Ethan also identified test preparation

So, we want them to do well, trying to gear them up towards the ACT and college prep style questions and, sort of, the structure of that exam. We’re trying to mimic and mirror that in our classroom. We have two more years before they’re ready to take that.” (Interview 3, 1/18/12)

Learning standards. Learning standards were also identified as a school-related influence on teachers’ reading comprehension instruction. Six teachers stated that their lesson objectives were aligned to national or state learning standards; one teacher discussed alignment to the state standards, one to the Common Core standards, and the remaining four teachers described their lesson objectives as aligning to ACT’s College Readiness Standards. Ethan, for example, was asked to explain why he focused his lesson on sequencing, determining cause and

effect, and extracting information from a short narrative non-fictional passage. To this he replied, “They are part of the five college readiness standards that we’re working with this semester” (Interview 2, 1/13/12). Ethan, like many other teachers, was part of a ninth grade English team and made decisions with his colleagues. Laura, however, seemed to work independent of a team and made many instructional decisions on her own. When Laura was asked to describe why she planned a lesson in which students were expected to demonstrate an understanding of the plot structure of a tragedy, Laura responded, “Well, I know that I’ve gotta teach some standards, so...” (Interview 1, 12/5/11). This response suggests that although Laura made an effort to align her instruction to learning standards, these standards were chosen at random.

Collaboration. Five teachers consistently discussed the influence of collaboration on their planning and instruction. Collaboration included working or planning with other special or general educators around reading comprehension instruction. Angela, for example, co-taught classes with the freshmen, sophomore, and junior general education English teachers in addition to her special education reading class. She collaborated regularly with these teachers and attributed much of what she did in her own classroom to their collaborative efforts. Angela explained that she used the STEAL (Speech, Thoughts, Effects on others, Actions, and Looks) graphic organizer to assist students in identifying character traits because her co-teachers use it, explaining, “I learn a lot of strategies from them” (Interview 2, 12/15/11). Rebecca also spoke extensively about the positive impact that collaboration with her special education colleague who also taught the same reading class had on her own instruction, often referring to her colleague as her “partner in crime”. Rebecca explained that they were “lucky to have some common planning time together”. During this time, they located relevant reading material and made

accommodations and modifications as needed (Interview 1, 12/19/11). Other teachers described collaboration with others in their schools, including general and special educators, English and Social Studies teachers, and grade level and course teams. Both Rachel and John also identified collaborating with their school-based reading specialists.

Directives. School-based directives were identified as influencing the reading comprehension instruction of five teachers. Directives described policies or procedures mandated by a school-based department or by administration. The influence of directives on instruction generally had a negative connotation, and teachers often described directives as something over which they had no control. Miguel mentioned the influence of directives in all three of his interviews. For example, when asked to explain why he selected his lesson objectives, he responded, “Those objectives are from the English department. That’s what they want us to work on anytime we’re reading” (Interview 1, 11/21/11). Similarly, when asked what influenced his decision to have students read *Monster*, he explained, “Because that’s what our English department said I could pick. It’s what they’re using” (Interview 2, 11/28/11). John also identified school directives as influencing his implementation of the “Concern Chart” in two lessons, stating, “In our department, we have a consensus that the concern chart would be a common practice. If my supervisor comes to view us during the lesson, it will be good to let them know and let them see that we are making an attempt, even in the special ed case” (Interview 3, 12/8/11). Not all directives were unfavorable, however. Ethan, for example, explained that he selected *To Kill a Mockingbird* as part of a course team. Furthermore, he explained that the text was also selected as part of a school wide theme – heroism (Interview 3, 1/18/12).

Laura was the only teacher who spoke about how non-instructional directives impacted her planning and instruction. Specifically, she discussed how the additional responsibilities of being a special educator influenced her work:

So, unfortunately, you know, teaching should be my first priority, and lesson planning should be my first priority, but that falls to the bottom of the pack because we've been under this [state] audit and if we didn't get out of the [state] audit then they were gonna come in and close the school. So, writing the IEPs and doing the special ed work, that was more important. (Interview 3, 12/20/11)

Alignment to general education. Five teachers identified alignment to general education as influencing their reading comprehension instruction practices. In these cases, teachers made direct connections between their own instructional practices and the general education curriculum or classroom. In the following excerpt, Angela described the influence of general education on the types of activities she planned for her students:

I have to come up with something they have a chance of getting and being successful at. But at the same time, they're expected to meet the same standards and goals, take the same standardized test, which gets a little frustrating. So I have to make sure that everything is aligned with what's going on in gen ed classes. (Interview 3, 1/12/12)

Additionally, Miguel described alignment to general education influenced his planning:

Since taking over freshmen direct service, I made a point that we are going to do the regular ed work - modified, slowed down, scaled back, however you wanna look at it, but we're doing the same things as everybody else. It makes the kids feel better. It makes me feel better. (Interview 3, 12/5/11)

Personal Factors

Lastly, teachers identified various personal factors that influenced their instructional practices. Personal factors were those controlled by the teacher and included their understanding of reading comprehension instruction, their preparation to teach the reading course, their experiences as educators, and their interests.

Defining reading comprehension instruction. All teachers were explicitly asked to provide their own definition or description of what reading comprehension instruction is or includes. Seven of the eight teachers were able to articulate their own understanding of reading comprehension instruction; the remaining teacher instead discussed the importance of delivering instruction that benefits students. Together, these responses shed light on the influence that personal understanding had on classroom practices. Some teachers spoke directly about giving students the tools to increase their own understanding of text. Cathy, for example, described reading comprehension instruction to mean the following:

Basically, I understand it to mean I'm supposed to be helping students to better understand what they're reading though teaching them different strategies that can help them get what they're reading - either fix up whatever is hindering them from understanding the text or teach them to think more critically about what they are reading. So, yeah, that's what I think I'm supposed to be doing in terms of reading comprehension instruction. (Interview 2, 12/6/11)

Rebecca provided a similar description:

I think it's teaching those strategies and tools that can help young people to grasp whatever it is that they're reading, whether its at their level or it's at a higher level. I think it's, for the most part, trying to teach the strategies we use to understand material no matter what the content. (Interview 2, 1/9/12)

Other teachers responded by listing some of the different components of reading comprehension instruction. Angela, for example responded, "I guess it's like just stopping, summarizing, asking questions, predicting, previewing" (Interview 2, 12/5/11). Similarly, Rachel stated, "I feel like its strategies while reading and then questioning afterwards" (Interview 2, 1/10/12). Miguel, on the other hand, explained, "I guess its comprehension strategies and stuff like that - but I can't remember any. If my kids can tell you what the book was about, whether they liked it or not, and give solid reasons why, then I'm fine with that" (Interview 2, 11/28/11).

Other responses, however, revealed a different perception of the value and understanding of reading comprehension instruction, as captured in the following statements made by Laura:

I realized that there were these kids that, it wasn't just about English, and it wasn't about reading strategies, it was just about decoding. (Interview 1, 12/5/11)

The old-fashioned ways, you know, like the big five: visualizing, making inferences, and all of that sort of thing is - I don't know where that falls anymore. I mean, I've read studies that say that they're over taught and that, you know, how hard is it to learn to visualize? I mean, how many times do you have to teach them that? They already know that. And that a lot of their problems lie in just being able to know what the word is on the page. And if they know what the word is on the page, they already know what it means, and that increases their comprehension. So, I don't know. I think that teaching - I'm kind of coming around to the idea that teaching comprehension strategies are a little worn out. (Interview 2, 12/12/11)

Laura's responses suggest that she did not see the benefit of teaching her students reading comprehension strategies. Instead, she felt that her students needed instruction focused on decoding.

Preparation. Similar to defining reading comprehension instruction, all teachers were also asked to describe how prepared they felt to teach this particular reading course to their students with LD. Three teachers indicated that they felt prepared. Laura, for example, explained that she felt very qualified to teach the course, but added, "there's always something new to learn. It's a tremendously complicated process, to learn to read" (Interview 1, 12/5/11). Miguel also reported feeling prepared to teach the course, but explained his limitations in teaching reading: "Very, because I am not teaching students how to read. I feel confident to get these students to enjoy reading and expose them to great writing. I'm thankful I don't have to teach kids how to read, because I don't know how to teach kids how to read" (Interview 1, 11/21/11). Three additional teachers described feeling relatively prepared to teach the course. Rebecca, for example, explained, "My preparation is mixed. There is not a set curriculum, which makes teaching it difficult. We support each other, but wish we had something like READ 180" (Interview 1,

12/19/11). Similarly, Angela commented, “I feel somewhat prepared to teach this course...I do, however, feel I sorely lack a formal training in reading strategies for LD students” (Interview 1, 12/8/11). Cathy was the only teacher to openly express feeling unprepared:

This year I do not feel as prepared to teach this reading course as in past years...I love reading and I want my students to love reading but I don't feel like I have as much training as I could to be doing a better job. Like I feel like if I had additional training, and that's something that I really need to think about seriously, is how to go about getting that additional training. If that means me pursuing a reading or literacy endorsement of some sort, I'm not sure; I haven't really figured that out yet. But I think it's important to know, kind of, what are best practices for working with students with learning disabilities in reading classes and I think, since I've been teaching reading in (district), the reading and language arts curriculum has changed over the past three years that I've been teaching it and I've just kind of have gone with the flow. Whatever curriculum has been presented and offered I'll educate myself on that and then that's the curriculum that I'll use. (Interview 1, 11/29/11)

Experience. Four teachers also described the influence that experience had on their current instruction. Miguel, for example, attributed his wide use of student read aloud to experience, stating, “This is just how I typically do things” (Interview 1, 11/21/11) and “I guess I just do what I've had success with in the past.” (Interview 2, 11/28/11). Similarly, Angela described the influence that experience had on her text selection: “I had actually used this story with my other [general education] class. It worked out well so that's why I chose it...I thought that it was worth trying with my self-contained kids (Interview 2, 12/15/11). Additionally, when asked why she focused her lesson on story structure, Laura candidly replied, “I just do my own thing. This is my own experience” (Interview 1, 12/15/11).

Interests. Additionally, four teachers also identified the role that personal interests had on their reading comprehension instruction. When asked why she had her students annotate text, Laura explained, “Well, I wanted to try out a new strategy. I've been trying out a bunch of new strategies and I just wanted to try out this one” (Interview 3, 12/20/11). Miguel, who regularly had students read aloud and then summarized text for them, explained the use of these two

practices with the following responses: “I like the reading out loud” and “I like to be the human ‘cliffs notes’ at the end of each section (Interview 2, 11/28/11). Additionally, John described how his personal interests influenced the text read in his class:

The reason for selecting this particular text [*Last of the Mohicans*] is because, you’re gonna laugh, I’m biased. I’m prejudiced. I’m much of a romantic myself. I enjoy many different types of readings. I enjoy getting, I guess, involved in stories...I think I just like stories that have particular endings. Whether it is love, whether it is tragedies, whether it is adventure, I think it’s just something that was instilled in me. (Interview 2, 12/1/11)

Summary of factors that influence reading comprehension instruction. Data collected from these interviews reveal much about the factors that special education teachers identified as influencing their implementation of reading comprehension instruction. Both similarities and differences emerged as teachers described these influences. However, all eight teachers identified at least one personal, school, and student-related factor that influenced their instructional decisions. A common thread across all eight teachers was the important role that students’ present level of performance had on the instruction they implemented. Teachers spoke about meeting student needs and providing students with opportunities to be successful. Additionally, teachers discussed the importance of ensuring that their instruction was relevant and engaging to students. Many teachers also reported that their instruction was heavily influenced by test preparation and national learning standards. Similarly, alignment to general education was another factor identified by several special education teachers.

Teacher understanding of reading comprehension instruction varied and responses suggested that teachers may not truly understand the importance of explicit reading comprehension instruction for their students with LD who struggle with reading. Teachers did, however, report mixed levels of preparation to teach reading, and many expressed a desire for additional professional development to better prepare them to provide their students with

effective reading instruction. In summary, these personal, school, and student-related factors were often interrelated and underscore the complexity of reading comprehension instruction in urban special education classrooms.

V: DISCUSSION

A significant number of adolescents with LD experience difficulty comprehending what they read, particularly in secondary schools where content is taught primarily through textbooks (Scruggs, Mastropieri, McDuffie, 2007). Research has shown that many students with LD are inactive readers who lack the metacognitive skills that their proficient reading peers have (Gersten et al., 1998; Mastropieri et al., 2003). As a result, they may not realize that they should be actively monitoring their comprehension, how to recognize problem situations, or how and when to apply a strategy to assist in making meaning of what they read (Gersten et al., 2001). Given this, it is critical that special educators provide students with LD explicit reading comprehension instruction that includes a direct explanation of the strategy, teacher modeling, guided practice, and independent application (Armbruster et al., 2001; Biancarosa & Snow, 2006; Gersten et al., 2001; Mastropieri & Scruggs, 1997; NRP 2000; Snow, 2002; Swanson, 1999a). Previous observation studies on reading instruction for students with LD have focused heavily at the elementary level (Swanson, 2008) and surprisingly little is known about what reading comprehension instruction for students with LD looks like in urban high schools. Thus, the purpose of this study was to describe and understand the reality of reading comprehension instruction in secondary special education reading classrooms for ninth grade students with LD.

Results from classroom observations conducted in this study indicate that special education teachers implemented a number of reading comprehension strategies, practices, and activities. The most frequently observed practices included student and teacher read aloud, questioning, independent seatwork, activating prior knowledge, and using graphic organizers. Teachers also exposed students to several reading comprehension strategies such as summarizing, annotating, and previewing. Explicit instruction in how and when to use reading

comprehension strategies, however, was not observed. Additionally, findings from teacher interviews reveal that a wide variety of student, school, and personal factors influenced their instruction, including their students' abilities and needs, test preparation, and personal interests. Teacher responses conveyed a limited understanding of the components of reading comprehension instruction, and teachers reported mixed levels of preparation to teach reading to their ninth graders with LD. These results are reported with confidence as teachers had multiple opportunities to review the data collected from both classroom observations and interviews. These findings illustrate a gap between the reading comprehension instruction strategies, practices, and activities implemented in ninth grade special education reading classrooms and the evidence-base of reading comprehension instruction for secondary students with LD.

Reading Comprehension Instruction

These findings from lesson observations in ninth grade special education reading classrooms reveal much about the ways that urban high school special education teachers incorporate reading comprehension into their instruction. Teachers implemented a number of reading comprehension strategies, practices, and activities to support their students' ability to understand the meaning of written text and research suggests that many of the observed practices (e.g. questioning, activating prior knowledge, graphic organizers, summarizing) have been very effective for improving reading comprehension of students with LD when the instruction is explicit in nature (Berkeley et al., 2010a; Edmonds et al., 2009; Mastropieri & Scruggs, 1997). However, teachers did not provide students with explicit instruction on why, when, and how to use the strategies, nor did they provide students with opportunities to practice using the strategies independently. Additionally, despite research on the positive effects of targeted instruction for small groups of 2-3 students (Allington, 2006) and the wide range of reading abilities present in

these classrooms, instruction was predominantly teacher-centered and the most common grouping structure observed was whole group instruction, which comprised 66% of the grouping practices used. Instruction was largely undifferentiated, and all students were expected to read the same text, respond to the same questions, and participate in the same activities.

Reading text aloud during reading comprehension instruction was a critical aspect of all the classes observed. All teachers either read the written text aloud to their students or had students take turns reading it aloud with many teachers incorporating both into their lessons. During read aloud activities, the entire class was always involved, and all students were responsible for the same text. The practice of having students read aloud typically lasted for about 50% of the class period when incorporated into the lesson. When students read aloud, they often read for pages at a time and many students demonstrated significant difficulty with decoding and word recognition indicating that the text read was not at their instructional reading level. In light of what is known about the relationship between decoding and reading comprehension, this procedure likely interfered with the ability to comprehend the text for both the reader and for his/her classmates who were listening to the reading (LaBerge & Samuels, 1974, Gogh & Tunmer, 1986). In addition to students reading aloud, teachers also frequently read aloud to the class. During this time, students were typically not actively engaged in any reading activities other than possibly listening. Instead, student expectations during read aloud were often unclear and students were observed engaging in other activities, including sleeping, talking and working on other assignments.

Research suggests that teacher read aloud is an essential component of reading comprehension instruction for older struggling readers as it provides students with access to text that they may not be able to read independently and allows them to engage in a text experience

with a more proficient reader (Ivey, 2002). However, for students with LD, the instructional practice of reading aloud by itself is not sufficient for improving reading comprehension and should never replace systematic, explicit instruction in comprehension strategy use (Roberts et al., 2008). Read alouds should be interactive, such that while text is read aloud, teachers should model and explain specific mental processes used to monitor comprehension and students should have multiple opportunities to practice the strategies modeled on their own with materials that they can manage independently (Duke, Pearson, Strachan, & Billman, 2011).

Teacher and student read alouds were typically embedded with teacher-generated questions about the reading. Questions were typically posed to the whole group and asked students to recall information from or make inferences about the text. This instructional combination mirrors previous studies in elementary reading rooms, which found that reading comprehension was primarily delivered through teacher or student read alouds and that comprehension was primarily assessed through factual questioning initiated by the teacher (Durkin, 1978-79; Kethley, 2005; Moody et al., 2000; Ness, 2011; Swanson & Vaughn, 2010; Vaughn et al., 1998). Consistent with these findings, a majority of the teacher-generated questions were straightforward, prompting students to recall information directly from the text (Kethley, 2005; Vaughn et al., 1998). In addition to recall-type questions, some teachers also asked students questions that prompted them to draw inferences by relating textual evidence to the reader's prior knowledge. Inference-type questions were regularly asked by one teacher and only occasionally by others. The ability to generate inferences is important to text comprehension as it allows the reader to integrate what they already know with what they read (Kintsch, 1998), and secondary students with LD have demonstrated improvements in reading

comprehension and the ability to answer inference-type questions after receiving inference strategy instruction (Fritschmann et al., 2007).

Several studies investigating the effects of questioning on reading comprehension have produced positive results for students with LD (Mastropieri & Scruggs, 1997; Swanson, 1999a). A critical component of effective questioning for comprehension, however, includes assisting students in becoming independent at self-questioning while reading. This includes teaching students how to generate and answer their own questions about text and providing students with strategies for what to do when they cannot answer a question (Berkeley et al., 2010a; Mastropieri & Scruggs, 1997; NRP, 2000). Although teachers asked students a number of text-based questions, teachers did not provide students with instruction on how to generate their own questions or what to do if they could not answer teacher-generated questions. Often times, students were asked questions that they did not correctly answer and teachers responded by either ignoring the answer and resuming instruction or simply supplying students with the correct answer. The only example of strategy instruction related to questioning was observed in Angela's class when she taught students how to distinguish between questions that could be answered based on information in the text and questions that required prior knowledge or inference. In light of the prevalence of predominantly recall-type teacher questioning, coupled with the observed difficulty that many students displayed responding to these questions, it was especially concerning that not once did students receive instruction on how to generate their own questions about the text or how to activate a fix up strategy when they could not demonstrate comprehension. These findings mirror an earlier study in which secondary special educators had developed a routine of reading the text, finding the answer, explaining the answer, and telling students what to write down (Meents, 1990).

In addition to reading aloud and questioning, independent seatwork was also a widespread practice, which alone accounted for 16% of the total reading comprehension observed. During this time, students worked independently on reading comprehension related assignments, including reading passages and/or completing comprehension worksheets consisting of mostly answering questions while the teacher often circulated to ensure that students were on task or to assist individual students with completing their work. In three of these lessons, students engaged in this type of independent seatwork for more than half of the class period. In nearly all of the independent seatwork observed, the entire class completed the same assignment; only once were students observed reading different passages during independent seatwork. Although independent seatwork was often assigned following teacher or student read aloud, the work that students were assigned did not provide students with authentic opportunities to practice a newly learned skill collaboratively or independently. In fact, independent seatwork often appeared to be busy work assigned to students toward the latter part of the lesson, often ending when the bell rang. Moreover, students were rarely observed receiving any feedback on their assignments unless they explicitly asked for teacher assistance. These findings are also consistent with previous studies in resource rooms where students spent large amounts of time doing individual seatwork (Moody et al., 2000; Swanson & Vaughn, 2010; Vaughn et al., 1998).

Other commonly observed practices focused on activating prior knowledge and using graphic organizers. All eight teachers implemented activities to activate students' prior knowledge. Typically, activities to activate prior knowledge were presented at the beginning of class and students were prompted to recall previously learned material or make a connection with what they were reading. The process of activating prior knowledge is especially important for

students with LD since many students with LD may not be able to access or possess prior knowledge that can assist in learning new information (Fagella-Luby & Deshler, 2008; Roberts et al., 2008). Additionally, students were observed completing graphic organizers before, during and after reading in seven of the lessons, and one teacher was observed using the same graphic organizer across multiple lessons. Various types of graphic organizers were used to assist students in organizing information such as character traits and story events. Previous research indicates that using graphic organizers can improve reading comprehension for students with LD (Kim et al., 2004). It is important to note that although the practices of activating prior knowledge and using graphic organizers were observed less often than independent seatwork, these activities were often short in length and did not provide instruction on the purpose or how to use these types of strategies in their own reading. Additional reading comprehension strategies, practices, and activities observed included summarizing, annotating, previewing, predicting, setting a purpose, and story structure.

Teachers regularly exposed students to a number of active reading strategies that can improve comprehension, including questioning, previewing and predicting, activating prior knowledge, drawing inferences, summarizing, and many of these instructional practices have shown to significantly improve the reading comprehension for students with LD (Berkeley et al., 2010b, Gersten et al., 2001; Sencibaugh, 2007). However, not once did teachers provide students with explicit reading comprehension strategy instruction. This is particularly alarming, as students with LD are unlikely to infer the strategies required for comprehension (Atkinson, Wilhite, Frey, & Williams, 2002; Jenkins et al., 1994). Many students with LD lack the information-processing skills required to comprehend complex text (Fisher et al., 2002) and may not realize that they should be actively monitoring their comprehension, how to recognize

problem situations, or how and when to apply a strategy to assist in making meaning of what they read. A “never assume” approach has been suggested when working with students with LD (Foorman & Torgesen, 2001). In fact, it has been advised, “readers who are not explicitly taught these procedures are unlikely to learn, develop, or use them spontaneously” (NRP, 2000, p. 4-40).

The benefits of explicit comprehension strategy instruction for students with LD are widely documented (Antoniou & Souvignier, 2007; Berkeley et al., 2010b; Faggella-Luby & Deshler, 2008; Gersten et al., 2001; Nelson & Manset-Williamson, 2006; Swanson, 1999a), yet the instruction observed did not teach students why, how and when to employ comprehension strategies (Duke & Pearson, 2002). Instead, instruction remained predominantly teacher-centered and seemed to foster dependent, rather than independent, reading behavior. The absence of explicit strategy instruction observed in this study is consistent with findings from previous observation studies of reading instruction in elementary resource rooms, which reported little to no evidence of comprehension strategy instruction (Moody et al., 2000; Swanson & Vaughn, 2010; Vaughn et al., 1998).

It is important to note that the lessons in which teachers implemented the most reading comprehension strategies, practices, and activities did not necessarily generate the highest student engagement or suggest the highest student comprehension of text. On the contrary, many of these lessons were the ones that were predominantly teacher-centered, directed at the whole class, and elicited little student participation. Earlier comprehension strategy instruction research suggested that teachers select and teach one strategy at a time (Keene & Zimmermann, 1997). However, more recent suggestions have been made to teach students a range of comprehension strategies that they can select from given a particular reading situation (Duke et al., 2011).

Moreover, Duke and colleagues argue that the emphasis of reading comprehension instruction should not be on the strategy itself, but on teaching students to recognize the conditions for applying the strategy and to understand that strategies will lead to more effective and strategic reading.

Factors that Influence Reading Comprehension Instruction

In reflecting on their lessons and elaborating on their instructional practices, teachers identified multiple factors that influenced their use of reading comprehension instruction. Specifically, teachers identified student, school, and personal influences. Not surprisingly, all teachers identified students' present level of performance as influencing their instruction. Teachers emphasized the importance of meeting students where they are at and delivering instruction at their students' level. Additionally, most teachers discussed the need to engage their students with instruction that was interesting and relevant to their students' lives and experiences. The influence of student performance and student interests on instruction is certainly appropriate given the variability present in special education classrooms (Valencia, 2011) and the importance of knowing students as learners (Wharton-McDonald, 2011). However, while responses suggest that teachers had the best intentions to deliver "specially designed instruction" in alignment with IDEA (20 USC 1401.25 ct seq.), these individualized practices were not observed. Instead, the reading instruction was largely undifferentiated and taught to the whole group. This is in direct opposition to the instructional needs of students with LD. Students with LD need instruction that is more explicit, more intense, and provides more support than their typically developing peers (Foorman & Torgesen, 2001; Zigmond, 2001). Moreover, there was little evidence to support the influence of IEPs on instruction. In fact, when explicitly asked about the role of IEPs, three of the teachers candidly explained that IEPs did not

influence their instructional decisions at all. Regardless of the reasons that teachers did not use information provided in IEPs to drive their instruction, this finding is concerning, as IEPs are required by law as a means to ensure that all students served under IDEA receive a free appropriate public education (Herr & Bateman, 2003). Perhaps what is most concerning, however, was the lack of progress monitoring and student assessment data used to inform instruction. Not all students with LD share the same needs or benefit from the same instruction. Therefore, it is essential that special educators use ongoing formative assessments to identify specific student needs (Wharton-McDonald, 2011) and match their instruction to meet individual needs.

Teachers also identified multiple school-related factors that influenced their instruction. Teachers generally reported positive experiences collaborating with other educators in their schools to plan and implement reading instruction and several teachers spoke directly about the positive influence that departmental meetings and co-teaching opportunities had on their instructional decisions. These findings support previous studies in which teachers reported positive perceptions of collaborating with colleagues (Hargreaves & Fink, 2006). In addition to the influence of collaboration, many teachers identified pressures to implement test preparation and align their instruction with the general education curriculum. These responses are expected, given that students with disabilities are included in statewide assessments and access to the general education curriculum is a fundamental component of special education (Herr & Bateman, 2003). Despite the likelihood that many of the students in the observed classes needed instructional accommodations or modifications to access the curriculum, it is important to note that during the lesson observations there was little evidence of any instructional adaptations made to meet individual student needs. These results are concerning as the purpose of special

education is to provide “specific, directed, individualized, intensive, remedial instruction” (Zigmond & Baker, 1995, p. 178). Collectively, these findings reveal the significant influence that factors within the school have on teachers’ instructional decisions and illuminate the need for schools to partner with special educators to ensure that individualized instruction is being implemented and that progress is being monitored for students with disabilities as per their IEPs.

Lastly, teachers identified multiple personal factors that influenced their instruction, including their experiences as educators and their personal interests. Many teachers reported implementing strategies, practices, and activities based on what that they had success with in the past. Others explained that they selected texts and activities based on their own personal preference. Together, these findings suggest that the instruction provided in the special education classrooms was not specially designed for students, but selected and implemented based on teacher preference or convenience. Additionally, teachers were asked to describe their understanding of reading comprehension instruction. Although responses varied, most of the teachers described reading comprehension instruction by listing several different reading comprehension strategies. These findings indicate that while teachers were familiar with many of the active reading strategies that good readers use, they did not have a firm understanding of the benefits of reading comprehension instruction or the explicitness required for students with LD to independently use these strategies. Perhaps teachers thought that their students would learn the strategies simply by observing them.

It is well documented that older struggling readers benefit from explicit comprehension strategy instruction. This includes teacher modeling and thinking aloud how to self-monitor their understanding and processing of the meaning of text before, during and after reading. Additionally, this involves engaging students to become actively involved in this process

(Edmonds et al., 2009). Although teacher modeling is an essential component of effective reading comprehension instruction, research suggests that students with LD benefit most from reading comprehension instruction that is explicit and overt and teaches students how to think more systematically about text (Fagella-Luby & Deshler, 2008). Furthermore, it is imperative that students have ample opportunities for guided and independent practice using the strategy (Duke et al., 2011). Although a variety of strategies, practice, and activities have shown to be very effective for improving the reading comprehension of students with LD, they are of little use if not taught systematically and explicitly (Berkeley et al., 2010b).

A Reality Check

In 2008, Swanson asked if research is making its way into classrooms. With mandates to use scientifically, evidence-based instruction, coupled with what we know about the reading profiles of students with LD and the key components of effective reading instruction, one would expect to see high quality, “specially designed”, evidence-based comprehension instruction in special education reading classrooms. Unfortunately, based on these results, the answer is a resounding no. Special education was designed to provide students with “specific, direct, individualized, intense, remedial instruction” (Zigmond & Baker, 1995, p. 178). Although teachers certainly had the best intentions of meeting their students’ individual needs, a common thread across all classrooms in this study was teacher-centered, undifferentiated instruction delivered to the whole group. Reading comprehension instruction was primarily devoted to reading aloud, questioning, and independent seatwork. And although many of the active reading strategies used by good readers (e.g. summarizing, previewing, predicting, etc.) were observed, students were not explicitly taught how and when to use these strategies. Given the characteristics of students with LD, namely their poor information processing and generalization

skills (Gersten et al., 1998; Mastropieri et al., 2003), it is likely that students in the present study will have difficulty independently demonstrating the reading comprehension strategies, practices, and activities without considerable teacher support. These results mirror earlier descriptions of reading instruction implemented in elementary resource classrooms (Gelzheiser & Meyers, 1991, Moody et al., 2000; Swanson & Vaughn, 2010; Vaughn et al., 1998) and suggest that urban high school special education teachers implement many of the same practices that are implemented in elementary resource rooms. Collectively, these findings illustrate a disconnect between research and practice and paint a dark reality for adolescents with LD who struggle with reading comprehension in high school.

Implications for Practice and Research

The present study offers a rare glimpse into the reality of reading comprehension instruction for adolescents with LD in urban special education settings and has implications for both practice and research. It is widely documented that the classroom teacher is the most powerful factor in determining student learning (National Commission on Teaching and America's Future, 1997; NRP, 2000; Snow et al., 1998) and effective reading instruction is dependent on teachers' content knowledge, collaboration with others, and opportunities to make instructional decisions and reflect on their instruction (Swalord, Chapman, Rhodes, & Kullis, 1996). Consequently, improved reading comprehension for students with LD requires the implementation of strategy instruction (Sencibaugh, 2007), and teachers need extensive training to effectively implement these strategies (Deshler et al., 2001). Additionally, these findings suggest that teachers need training on data collection and progress monitoring. Therefore, this research has critical implications for both preservice and inservice teacher preparation.

Improved teacher preparation to meet the needs of students with disabilities has been an ongoing call that has remained relatively unanswered. In light of the well-documented research to practice gap (Greenwood & Abbott, 2001), however, it is critical that future teachers receive training to meet the diverse needs of students of varying levels of reading achievement. Additionally, effective teacher education programs recognize that over time, teachers will become increasingly knowledgeable and skilled as their own expertise develops (Bransford, Darling-Hammond, & LePage, 2005). Therefore, ongoing support is crucial and research suggests that instructional coaching has been effective for increasing both preservice and inservice teachers' fidelity of implementing evidence-based practices (Kretlow & Bartholomew, 2010). The critical components of coaching include group training sessions, follow up observations, and specific feedback including observation data, self-evaluation, and modeling. Furthermore, teachers must also have sustained opportunities to apply their new learning to their planning and instruction (Darling-Hammond et al., 2009).

Given some of the challenges inherent in urban secondary schools, specifically size and bureaucracy coupled with highly diverse student populations (Chou & Tozer, 2008), these findings also have important implications for schools and administrators. It is critical that school administrators collaborate with special educators to share the instructional decision-making. Teachers need a curriculum that is aligned with assessments and teachers need the time and training to plan and teach that curriculum (Johnson & Kardos, 2008; Weiner, 2000). Using Feiman-Nemser's (2001) framework of the "continuum of teacher learning", it is imperative that administrators recognize the various levels of support that teachers need throughout their careers and differentiate training to meet these various individual needs. For example, findings from this study suggest that teachers may benefit from professional development focused on a variety of

topics, including assessment, thinking aloud, questioning, instructional planning, selecting texts, grouping, and pacing. Additionally, administrators must assume a more active role in monitoring the delivery of special education services to ensure that instruction is individualized and driven by student data.

The current study also presents compelling evidence of the need for advocacy on behalf of adolescent students with LD. The reading classrooms observed in this study is *their* reality. Typically, students do not have a voice in who teaches them, what they are taught, how they are taught, and where they are taught. Critics have long argued against the special education resource room, stating that it consistently provides lower quality, less engaging instruction and condemn students to a lifetime of low groups (Heibert, 1983; Moody et al., 2000; Vaughn et al., 1998). Therefore, it is essential that schools more closely monitor that students with disabilities are placed in the least restrictive environment for reading instruction and ensure that their needs are met, regardless of the setting. Furthermore, students must be provided with opportunities that increase the instructional intensity they receive through small groups or one-on-one instruction (Elbaum, Vaughn, Hughes, & Moody, 2000).

This study has also established several implications for future research. These findings have illuminated the complexity of reading comprehension instruction and the factors that drive instructional practices in secondary special education classrooms. Moreover, this study has revealed the need to develop special education teachers' knowledge, skills and use of time to effectively deliver evidence-based reading comprehension instruction, opportunities to reflect on their own instructional practices with colleagues, and student data to drive their instruction decisions. Therefore, first and foremost, it is critical that future research continue to focus on understanding the reading comprehension profiles of adolescents with LD to better match

instruction with student needs. Specifically, this may provide educators with a better understanding of the level of intensity and explicitness required for effective comprehension instruction. Additionally, more observation research is needed on the types of instruction provided to adolescents with LD in secondary schools. It is critical that the field continues to monitor the extent that evidence-based practices are implemented in high school classrooms. Observation research should focus on instruction implemented by both general and special education teachers across multiple settings. Furthermore, future research should explore the practices of urban secondary special educators nominated as effective. These results may provide important information on the instructional contexts that facilitate improved instruction practices. Lastly, future research should continue to explore preservice and inservice teacher preparation programs for secondary special educators to determine the most effective methods for providing sustainable, continuous training on evidence-based instructional practices.

Limitations

Although the present study provides important information about the ways that special education teachers implement reading comprehension instruction for ninth graders with LD, several limitations inherent in the qualitative nature of this study must be noted. This study included a small sample of teachers who were distributed across multiple school sites, making the results difficult to generalize (Mertens, 2005). It is unclear if a similar analysis of a different group of teachers or teachers across other school sites would yield the same instructional practices or influential factors. Similarly, this study was conducted over a short period of time. As a result, it is difficult to determine the degree to which the observed instructional practices are typical or atypical (Patton, 2002).

Moreover, this study was limited to data collected from the teacher or observed during instruction. Although lessons generally aligned to the objectives identified in the Lesson Profiles, teachers did not systematically monitor student progress according to these objectives. During the interviews, teachers responded favorably that students had met the lesson objectives, yet the progress indicators included “student participation”, “following along”, “listening and reporting back on the information”, and “the conversations that they were having”. Based on the extensive amount of instructional time devoted to teacher and student read aloud, the student behavior displayed during this time, coupled with the extensive low-level questioning and unpredictable student responses, results from this study do not indicate that students were mastering lesson objectives. Information beyond teacher perceptions of strategy effectiveness is needed to determine if or to what degree these reading comprehension practices were beneficial to students with LD. Additionally, an investigation of the perceptions of external partners in the educational process such as administration, families, and students may have affirmed or challenged the framework established by the present study.

There were also threats to validity and reliability, such as observer effects. As a nonparticipant observer, the researcher may have been perceived as an outsider and both the observations and interviews had the potential to yield deceptive data that the participant thought the researcher wanted to see or hear (Cresswell, 2008). Additional time in the field may have reduced the observer effects. Despite these limitations, these findings do increase our understanding of the classroom realities for adolescents with LD.

APPENDICES

APPENDIX A

Approval Notice Initial Review (Response to Modifications)

September 1, 2011

Tiffany J. Ko, MA
Special Education
2327 West Harrison, #4
Chicago, IL 60612
Phone: (773) 517-3874 / Fax: (312) 996-5651

RE: Protocol # 2011-0685
“Reading Instruction for Adolescents with LD”

Please remember to submit a copy of research approval from the _____
_____ Research Review Committee prior to recruiting/enrolling subjects or collecting data
from _____ records. _____ approval should be obtained after the UIC IRB has granted
approval for this research. _____ approval must be accompanied by an Amendment Form
when submitted to the UIC IRB.

Dear Ms. Ko:

Your Initial Review (Response to Modifications) was reviewed and approved by the Expedited review process on September 1, 2011. You may now begin your research

Please note the following information about your approved research protocol:

Protocol Approval Period: September 1, 2011 - August 30, 2012

Approved Subject Enrollment #: 8

Additional Determinations for Research Involving Minors: The Board determined that this research satisfies 45CFR46.404, research not involving greater than minimal risk.

Performance Sites: UIC, _____ High School, _____
High School, _____ High School, _____ High
School, _____ High School, _____ High School, _____ High
School, _____

Sponsor: None

PAF#: - Not Applicable

Research Protocol(s):

- a) Reading Instruction for Adolescents with Disabilities; Version 1; 08/17/2011

Recruitment Material(s):

- a) Flyer; Version 1; 08/30/2011

Phone: 312-996-1711

<http://www.uic.edu/depts/ovcr/oprs/>

FAX: 312-413-2929

APPENDIX A (continued)

- b) Principal Intro Email; Version 2; 08/30/2011
- c) Recruitment Script; Version 1; 08/30/2011
- d) Participant Screening Checklist; Version 1; 08/30/2011
- e) Consent Script; Version 2; 08/30/2011

Informed Consent(s):

- a) Consent for Participation; Version 2; 08/30/2011
- b) Waiver of Informed Consent granted under 45 CFR 46.116(d) for students as secondary subjects
- c) Alteration of Informed Consent granted for the eligibility screener
- d) Waiver of Signed Consent Document granted under 45 CFR 46.117 for the eligibility screener

Parental Permission(s):

- a) Waiver of Parental Permission and Child Assent granted under 45 CFR 46.116(d) for children as secondary subjects

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific categories:

- (6) Collection of data from voice, video, digital, or image recordings made for research purposes.
- (7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
08/19/2011	Initial Review	Expedited	08/22/2011	Modifications Required
08/26/2011	Response to Modifications	Expedited	09/01/2011	Approved

Please remember to:

→ Use your **research protocol number** (2011-0685) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the enclosure,

"UIC Investigator Responsibilities, Protection of Human Research Subjects"

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 996-9299. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

APPENDIX A (continued)

Sincerely,



Marissa Benni, M.S.
IRB Coordinator, IRB # 2
Office for the Protection of Research Subjects

Enclosure(s):

- 1. UIC Investigator Responsibilities, Protection of Human Research Subjects**
- 2. Informed Consent Document(s):**
 - a) Consent for Participation; Version 2; 08/30/2011
- 3. Recruiting Material(s):**
 - a) Flyer; Version 1; 08/30/2011
 - b) Principal Intro Email; Version 2; 08/30/2011
 - c) Recruitment Script; Version 1; 08/30/2011
 - d) Participant Screening Checklist; Version 1; 08/30/2011
 - e) Consent Script; Version 2; 08/30/2011

cc: James V. Kahn, Special Education, M/C 147
Marie Tejero Hughes, Special Education, M/C 147

APPENDIX B

Participant Screening Checklist

Directions: For each statement below, please check “yes” if the statement applies to you or “no” if the statement does not apply.

Yes	No	Statement
		I am currently employed as a full-time special education teacher.
		I hold a valid Illinois state special education certificate.
		I teach at least one class period of ninth grade special education Reading in an instructional class setting.
		In the previously mentioned reading class, I teach at least three students with identified learning disabilities (LD)

If you checked “yes” to all of these statements and you are interested in participating in this study, please provide the following information and the researcher will contact you directly.

Name: _____ Telephone(s): _____ Best time and day to call: _____ Email: _____@_____
--

Thank you for your time!

APPENDIX C

Consent for Participation

University of Illinois at Chicago
Research Information and Consent for Participation
Reading Instruction for Adolescents with LD

You are being asked to participate in a research study. Researchers are required to provide a consent form such as this one to tell you about the research, to explain that taking part is voluntary, to describe the risks and benefits of participation, and to help you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Principal Investigator Name and Title: Tiffany J. Ko, PhD Candidate
Faculty Sponsor: Marie Tejero Hughes, Ph.D., Associate Professor
Department and Institution: Special Education Department, University of Illinois at Chicago
Address and Contact Information: 1040 W. Harrison St. MC 147 Chicago, IL 60607
Email: tko3@uic.edu
Phone: (773) 517-3874

Why am I being asked?

You are being asked to be a participant in a research study about reading instruction in special education reading classrooms for ninth grade students with learning disabilities (LD) and the factors that influence instructional decisions. You have been asked to participate in the research because you are employed as a full-time special education teacher in a CPS secondary school, hold a valid Illinois state special education certificate, and teach at least one class period of ninth grade reading in a special education classroom with at least three students with LD. Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future dealings with the University of Illinois at Chicago. **If you decide to participate, you are free to withdraw at any time without affecting that relationship.** A total of eight teachers may be involved in this research.

What is the purpose of this research?

Little is known about reading instruction for students with LD in secondary special education classrooms. The purpose of this study, therefore, is to learn more about reading instruction for adolescents with LD. Additionally, this study seeks to better understand some of the factors that teachers identify as influencing their instructional decisions.

What procedures are involved?

Participation in this study will involve the following procedures:

APPENDIX C (continued)

Teacher and Class Profile. After consenting to participate in the study, teachers will identify the class period that meets the inclusion criteria and will share the weekly schedule for that class with the researcher. Teachers will be observed teaching the same reading class to the same group of students throughout the study. Teachers will provide basic information on the Teacher and Class Profile, including years teaching, certifications, class size, and number of students with disabilities in target class. Teachers will return the profile to the researcher before the first scheduled observation. This profile will take approximately 10 minutes to complete and will only be completed once during the study.

Lesson Profile. The first lesson observation will then be scheduled, as agreed upon by the participant and researcher. Once scheduled, participants will complete a Lesson Profile, a description of the lesson planned, for the reading class to be observed and return it to the researcher before the scheduled observation. Teachers will not be asked to plan anything special beyond their standard instructional practices. This profile will take approximately 20 minutes to complete and will be completed three times during the duration of the study.

Lesson Observation. Teachers will be observed three times teaching the same reading class during the same period for the duration of the study. Each observation will last approximately 50 minutes. During this time, the teacher will implement their standard instructional practices while the researcher takes notes on teacher instruction using the Reading Instruction Fieldnotes Template. At the beginning of each interview, the researcher will share a summary of the fieldnotes collected during each observation with each participant, giving them an opportunity to confirm or amend the descriptions.

Interview. Within two days after each observation, teachers will participate in an interview with the researcher. Questions will explore the factors that influence teachers' instructional decisions observed during the reading classes. Following each interview, the researcher will share a summary of the interview responses and provide the participant with an opportunity to confirm or amend any statements. Each interview will last approximately 30 minutes. All interviews will be audio recorded and all audio files will be destroyed within 48 hours of being transcribed.

In summary, each participant will complete one Teacher and Class Profile and three Lesson Profiles, and participate in three lesson observations and three follow-up interviews. All data will be collected within a six-month period with each teacher being observed no more than once a week.

What are the potential risks and discomforts?

The research has minimal risks to you. To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. All data collected during the study will remain confidential; any identifying information will be deleted from any information disseminated and all data will be aggregated. No one,

APPENDIX C (continued)

including the participants' employer or supervisor, will have access to the data other than the researcher. There is the risk that a breach of privacy and confidentiality may occur.

Are there benefits to taking part in the research?

Taking part in this research study may not benefit you personally, but we [researchers] may learn new things that will help others. However, by participating in the study, teachers may be able to reflect on their own instructional practices and identify new ways in which they can further support students with disabilities. The findings will extend research on reading instruction for students with LD to the secondary level and could assist practitioners in determining the type of pre- and in-service professional development that special education teachers in urban settings need to provide effective, research-based reading instruction to adolescents with LD.

What other options are there?

Participation in this study is voluntary. You have the option to not participate in this study.

What about privacy and confidentiality?

The people who will know that you are a research subject are the researchers, Principal, and students. Otherwise information about you will only be disclosed to others with your written permission, or if necessary to protect your rights or welfare or if required by law.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. No one other than the researchers will have access to the data, including the participants' employer or supervisor. Each participant will be assigned a number. The list with the participants' contact information and linked number will be stored on the researcher's desktop in a password-protected file. All additional data collected will be deidentified and kept separate from the contact list. All de-identified electronic data will be stored on a password-protected desktop computer and all de-identified hard copy data will be stored in a locked file cabinet in the researcher's office. Once all data is collected, the contact list and codes will be destroyed. Additionally, interview audio files will be destroyed within 48 hours of being transcribed. All other data will be stored until the study is completed.

What are the costs for participating in this research?

There are no costs to you for participating in this research.

Will I be reimbursed for any of my expenses or paid for my participation in this research?

Upon completion of the third and final interview, participants will receive a \$50 gift card and classroom instructional materials (valued up to \$200).

APPENDIX C (continued)

Can I withdraw or be removed from the study?

If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty. If you discontinue participating in any of the procedures involved, you will not be able to continue participating in the research study. The investigator may withdraw you from this research without your consent if circumstances arise which warrant doing so (e.g., not scheduling an observation or interview after three attempts).

Who should I contact if I have questions?

If you have any questions about this study or your part in it, or if you have questions, concerns or complaints about the research you may contact the primary researcher, Tiffany J. Ko, at 773-517-3874 or at tko3@uic.edu. Additionally, you may contact the researcher's faculty sponsor, Dr. Marie Tejero Hughes, at marieth@uic.edu or 312-413-1623.

What are my rights as a research subject?

If you feel you have not been treated according to the descriptions in this form, or if you have any questions about your rights as a research subject, including questions, concerns, complaints, or to offer input, you may call the Office for the Protection of Research Subjects (OPRS) at 312-996-1711 or 1-866-789-6215 (toll-free) or e-mail OPRS at uicirb@uic.edu.

Remember:

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

Signature of Subject or Legally Authorized Representative

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I will be given a copy of this signed and dated form.

Signature

Date

Printed Name

Signature of Person Obtaining Consent

Date (must be same as subject's)

Printed Name of Person Obtaining Consent

APPENDIX D

Teacher and Class Profile

A. Teacher

1. Name: _____
2. School: _____
3. Total years of teaching: _____
4. Years of teaching at current school: _____
5. Total years of teaching reading course: _____
6. Highest degree attained/area(s): _____
7. Area(s) of certification (list all): _____

B. Class (To be observed)

8. Period/day(s)/time(s): _____
9. Total class size: _____ # Males: _____ # Females: _____
10. Race/Ethnicity (indicate number of students):
 Black: _____ Hispanic: _____ White: _____ Asian: _____ Other: _____
11. Ages (indicate number of students):
 14: _____ 15: _____ 16: _____ 17: _____ 18: _____ 19: _____ 20+: _____
12. Number of students with IEPs: _____
13. Number of students identified with a learning disability (LD): _____
14. Other identified disabilities: _____
15. Describe the reading skills of your students with LD in this particular class.
16. In your own words, what is the purpose of this reading course?
17. How would you describe the reading curriculum for this course?
18. Describe some of the factors you must consider in planning your lessons. (How do you decide what to teach each day?)
19. How prepared do you feel to teach this reading course to your students? Explain.
20. Is there any additional information you would like to share?

APPENDIX E

Lesson Profile

Teacher: _____

School: _____

Observed lesson # (1, 2, or 3): _____

Date of lesson to be observed: _____

Time of lesson to be observed: _____

Room of lesson to be observed: _____

Total number of students in this class: _____

Total number of students with an IEP in this class: _____

Total number of students with LD in this class: _____

Teachers: Please answer the following questions about the *lesson to be observed* to the best of your ability. Remember, the observed lesson must incorporate activities that include written text.

1. What written text(s) will be included in the observed lesson?
2. What are the lesson objectives for your students? (By the end of the lesson, students will be able to...)
3. Why are you teaching this particular lesson? What about this particular lesson seems important?
4. (How) Does this lesson build on the previous lesson?
5. (How) Does this lesson relate to future lessons?
6. Describe any accommodations or modifications that you will make to your lesson to meet the diverse student needs (or challenges) in your classroom.
7. What reading comprehension strategies, practices, and/or activities have you selected to help students achieve the learning objectives? Have the students learned these before? If yes, how?
8. How will you determine if students have met the lesson objectives?
9. Is there any additional information that you would like to share about the target lesson?

APPENDIX E (continued)

10. Briefly outline your lesson and indicate approximately how much time you plan to spend on each activity below.

Time	Activity

(Hughes, et al., 2011)

APPENDIX F (continued)

Sensitizing concepts:

Reading comprehension strategies, practices, activities:

- *Comprehension Monitoring* – readers learn to become aware of whether they understand a text and what steps they should take to correct comprehension difficulties; teacher uses think-aloud procedures to demonstrate an awareness of difficulties in understanding words, phrases, clauses, or sentences and how to use the text to solve a problem.
- *Cooperative Learning* – readers become independent of the teacher and learn to tutor each other, reducing the amount of time that a teacher spends with a student; activities include partner reading, summarizing, predicting, decoding, and understanding the story structure.
- *Graphic and Semantic Organizers* – readers are taught to make graphic representations of text material using semantic maps, story maps, expository maps, story schema, and graphic metaphors; the organizers facilitate learning and memory of text and the development of well-organized summaries; teacher shows readers how to construct their own organizer and complete it based on the text.
- *Text Structure* – (*narrative*) readers are taught how stories and their plots are organized into episodes; teachers teach students to ask and answer who, what, when, where, and why questions to identify time, place, characters, problems, goals, solutions, and resolutions; (*expository*) readers are taught how expository text is structured: 1) description (of characteristics, traits, properties or functions), (2) temporal sequence of events, (3) explanation (of concepts or terminology), (4) definition-example, (5) compare-contrast, and (6) problem-solution-effect.
- *Question Answering* - teacher asks students questions during or after reading passages of the text. Readers learn to identify questions that are based on the text and those that are based on prior knowledge or inference; questions generated by teacher or textbook.
- *Question Generation* – readers are taught to generate questions during the reading of a passage; teachers provide students with feedback on the quality of the question; students learn to evaluate their own questions – whether they covered important information, integrated information across the passage, and if they can answer their own questions.
- *Summarization* – readers are taught to identify the main ideas of a paragraph or a series of paragraphs; teacher uses examples and feedback to teach rules for identifying the main idea.
- *Multiple Strategies* – readers are taught how to apply and practice multiple strategies while reading a text; teacher models strategies and provides feedback as students practice.

(Anderson & Armbruster, 1984; NRP, 2000, pp. 4-70 - 4-93; Rissman, Miller, & Torgesen, 2009)

APPENDIX G

Interview Guide

Teacher #:	Interview #:
Date:	Method: ☐ phone ☐ in person

Thank you for allowing me to observe your lesson and for taking this time to be interviewed. This interview will be audio recorded so that I can access it at a later time. I am also going to be jotting some notes down as you respond. I will ask you a few questions about the particular lesson I observed in an effort to better understand your instructional decisions to implement particular strategies, practices, and actions. Please let me know if you need anything restated or if you have any questions about what I am asking you.

(Summarize fieldnotes.) Is there anything that I missed?

How do you think this lesson went? Why?

(Review the lesson objectives.) Do you think the students learned what you wanted them to learn? How do you know? Why/How did you select these objectives?

(Review the text(s) used during lesson.) Why did you select this text? Do you think it was appropriate for your students/lesson objective? Why or why not? Do you think that students comprehended the text? How do you know?

What reading comprehension strategies did you teach during this lesson? Were the reading strategies effective? How do you know they were or were not effective?

(Identify a specific strategy, practice, or activity observed.) Tell me about why you decided to do that.

What adaptations or modifications did you implement during this lesson?

Think about a particular student with LD in your class today that you believe was successful. Please don't say her/his name. Tell me why you believe s/he was successful. What reading comprehension strategies or activities assisted him/her in this success?

Now think about a particular student with LD that you believe was having difficulty with reading comprehension. Please don't say her/his name. Tell me why you think this was the case. What adaptations or modifications might you try differently next time?

Describe your process for planning this lesson.

Is there anything else you would like for me to know about this lesson or about your reading comprehension instruction?

APPENDIX G (continued)

Additional questions added for Interviews 2 and 3:

As a special educator, what are the factors that drive your instructional decisions each day?

As a special educator, (how) do IEPs influence your instruction?

How does this reading class differ from a reading class in general education?

What do you want your students to get out of this ninth grade-reading course?

Describe your overall understanding of reading comprehension instruction.

Describe your overall preparation for teaching reading to students with LD (probe: coursework, professional development, independent study, collaboration with other educators)?

As a ninth grade special education reading teacher, what types of instructional supports are currently in place for you? Are these supports effective? Why or why not?

What additional supports or resources do you need to effectively teach reading? Are these supports available?

That concludes the interview questions. Please let me know if you would like to withdraw or amend any of your responses. Thank you very much for your time.

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CURRICULUM VITAE

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EDUCATION

Ph.D. University of Illinois at Chicago, 2012 (Special Education)
M.A. Northeastern Illinois University, 2005 (Special Education)
B.A. University of Illinois at Urbana-Champaign, 1999 (Geography, African Studies)

UNIVERSITY TEACHING

Adjunct Professor, SPED 506: Frameworks and Perspectives in Special Education,
National Louis University (Summer/Fall 2011).

Adjunct Professor, SPED 500: Introduction to Exceptional Children and Adolescents,
National Louis University (Summer 2010).

Co-taught, SPED 583: Adaptations in Reading and Writing II, University of Illinois at Chicago
(2010).

Co-taught, SPED 463: Adaptations in Reading and Writing I, University of Illinois at Chicago
(2008).

Guest lecture, SEC 592: Secondary Education Internship, National Louis University (April,
2011).

EDUCATION EXPERIENCE

Special Education Coordinator, Academy for Urban School Leadership (2011 to present).

Special Education High School Coordinator, Academy for Urban School Leadership
(2009 to 2011).

Special Education Curriculum and Induction Coach, Academy for Urban School
Leadership (2009).

Special Education Teacher and Case Manager, Social Justice High School, Chicago Public
Schools (2005-2009).

Special Education Teacher, Amundsen High School, Chicago Public Schools (2002-2005).

Primary Resource Teacher, U.S. Peace Corps, Lesotho, Southern Africa (2001-2002).

English as a Foreign Language Teacher, U.S. Peace Corps, Cape Verde, West Africa (1999-2001).

SCHOLARSHIP

Ko, T. J. (2012, April). *Reading comprehension instruction for adolescents with LD*. Paper presentation at the annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.

Parker-Katz, M., Hughes, M. T., Olson, J. D., & Ko, T. (2012, April). *Teacher development to enhance content area reading instruction for students with disabilities*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.

Ko, T. (2012, April). *Reading comprehension instruction for adolescents with LD: A reality check*. Paper presented at the annual convention of the Council for Exceptional Children, Denver, CO.

Burke, L., Ko, T., Parker-Katz, M., & Hughes, M. T. (2012, April). *Reading Comprehension Instruction: Strategies for Adolescents With Disabilities*. Paper presented at the annual convention of the Council for Exceptional Children, Denver, CO.

Parker-Katz, M., Hughes, M.T., Olson, J., Ko, T., & Zurheide, J. (2011, November). *Collaborative Teacher Network: Improving teachers' use of content area reading strategies to support students' with disabilities*. Paper presented at the annual conference of the Literacy Research Association, Jacksonville, FL.

Ko, T. (2011, April). *Reading instruction for ninth graders with learning disabilities*. Paper presented at the annual convention of the Council for Exceptional Children, National Harbor, MD.

Ko, T. & Weisling, N. (2011, February). *Increasing teachers' equitable practices through disability simulation and IEP exploration*. Workshop presented at the annual New Teacher Center Symposium on Teacher Induction, San Jose, CA.

Weisling, N. & Ko, T. (2010, November). *Developing teacher empathy and understanding*. Interactive paper presented at the annual conference of the Teacher Education Division of the Council for Exceptional Children, St. Louis, MO.

Weisling, N. & Ko, T. (2010, February). *Teaching teachers about disability and reading instruction*. Workshop presented at the Illinois New Teacher Collaborative Conference, Springfield, IL.

Ko, T. (2009, October). *Strategic instruction for adolescents with disabilities*. Paper presented at the annual conference of the Illinois Teacher Education Division of the Council for Exceptional Children, Bourbonnais, IL.

Ko, T. (2009, April). *Co-teaching in secondary schools: Making it work!* Paper presented at the annual convention of the Council for Exceptional Children, Seattle, WA.

RESEARCH EXPERIENCE

Research Intern, Collaborative Teacher Network, University of Illinois at Chicago (2009 to 2011).

Principal Investigator, *Instructional Strategies for Adolescents with Disabilities*, (doctoral student research project), University of Illinois at Chicago (2009).

Research Intern, Mayor's Office for People with Disabilities, Chicago City Hall (2008).

MEMBERSHIP

American Educational Research Association (2011 to present)

Council for Exceptional Children (2007 to present)

International Reading Association (2009 to present)

SERVICE

Ko, T. (2012, April). *Special education teachers and service delivery models*. Session chair at the annual meeting of the American Educational Research Association, Vancouver, British Columbia, Canada.

Proposal Reviewer for the Teacher Education Division of the Council

PROFESSIONAL DEVELOPMENT PRESENTATIONS AND WORKSHOPS (Topics)

Accommodations and Modifications

Assistive Technology

Classroom Management

Co-Teaching

Collaborating with Paraprofessionals

Disability Awareness

IEP Development

Progress Monitoring

Special Education and Literacy