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Becoming Visible: Improving Reading Comprehension at the Middle Level

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BECOMING VISIBLE: IMPROVING READING COMPREHENSION AT THE
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Abstract

This paper examines reading comprehension at the middle level. The literature review covers definitions of reading comprehension and then discusses specific challenges and characteristics of middle level readers, with a particular focus on the importance of engagement, visible thinking, and a growth mindset for middle level readers. Specific strategies and tools for teaching and assessing reading comprehension are explained and samples are provided. The importance of continuing literacy instruction at the middle level is emphasized throughout.

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CHAPTER I: INTRODUCTION

Since the introduction of the Reading First initiative by the United States

Congress in 2002, a significant amount of attention has been paid to early and emergent

literacy. This attention has come in the form of research dollars, federal funding, and

professional development for early literacy programming in public schools. According to

an analysis of the U.S. Department of Education Budget for Fiscal Year 2017 that was

completed by the Alliance for Excellent Education (2017), funding for pre-kindergarten

education through fifth grade totals $27.6 billion while funding for seventh through

twelfth grade totals only $5.7 billion. While this funding has addressed a real need for

improving early literacy, "early improvements in literacy alone are not enough to

guarantee excellent adolescent literacy achievement" (Carnegie Council on Advancing

Adolescent Literacy, 2010, p. 8). The problem of students not reading at grade level

continues to exist with our students in grades four through twelve. In fact, the most recent

data from the main National Assessment of Educational Progress (NAEP) report (2015)

showed a decline in reading scores at grade 12 since data collection began in 1992, with

students scoring 292 in 1992 and 287 in 2015. Reading scores at grade eight showed only

a slight increase, from 260 in 1992 to 265 in 2015. Students in grade four, however,

improved steadily from 217 in 1992 to 223 in 2015. The most recent NAEP long-term

trend assessment comparison also showed an increase in reading scores at ages 9 and 13

between the years of 1971 and 2013 (National Center for Education Statistics, 2013).

However, average scores at age 17 showed no significant change during those same

years. The data does not look as good when we look at overall proficiency rates in

reading. NAEP data from 2015 showed that in grade four only 36% of students met proficiency in reading, 34% at grade eight, and 37% at grade twelve. So even with these improvements in scores, less than 40% of students at grades four, eight, and twelve can read at a proficient level. The picture does not improve when we compare the United States with other OECD nations. In 2015, U.S. 15-year-olds ranked 24th in reading, behind countries such as Singapore, Canada, Estonia, Slovenia, Australia, and the United Kingdom (OECD, 2015). This level has remained mostly unchanged since 2000, when PISA reading data collection began.

The most recent ACT data (2016) showed that 44% of 12th graders met the ACT College Readiness Benchmark in reading. In Minnesota, that number was slightly higher at 45%. Nationally, only 26% met proficiency benchmarks in all four areas of Reading, English, Mathematics, and Science. The authors also found evidence to continue to support their research findings from 2008 that "the level of academic achievement that students attain by eighth grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school" (ACT, 2008). In other words, academic achievement by eighth grade was more important for college and career readiness than any single action taken during high school. The ACT (2008) also found that students who met proficiency levels in reading were more likely to be on target in other areas, which emphasizes the importance of reading skills beyond the English Language Arts classroom. Furthermore, the authors determined that if achievement was improved by just two points in each area in eighth grade, high school performance and graduation rates would improve, college-degree completion would improve, and the unemployment rate would decrease (ACT, 2008). As

such, the positive ramifications of improving reading skills in the middle grades reach far beyond the high school classroom.

This is not to say the fault lies with pre-school or elementary reading instruction. Early literacy is crucial and reading development between the ages of three and five deserves attention. All of this focused effort and funding for early literacy has resulted in great strides in improving reading scores for our young readers through grade four. In fact, oral language development, print exposure beginning at an early age, and early mastery of the spelling–to–sound code have been found to be significant predictors of future reading success as measured ten years later (Cunningham & Stanovich, 1997). However, we have to acknowledge that the attention and funding cannot stop at grade three. All students at all grade levels, including struggling readers and proficient readers, benefit from continued and extensive reading opportunities (Cunningham & Stanovich, 1998). The sad reality is that even some of those students who began their educational careers reading at grade level may actually struggle to read at grade level once they become middle level readers (Heller & Greenleaf, 2007). They may become one of the 70% of middle and high school students who need reading intervention (Biancarosa & Snow, 2006). As text demands increase, students' reading ability must also progress so that middle and high school students can build on the literacy strategies they gained in the early years to comprehend the complex texts they will encounter (Kamil, 2003; Snow & Biancarosa, 2003). Success in early literacy cannot be viewed as a perfect inoculation against later reading difficulties (Carnegie Council on Advancing Adolescent Literacy, 2010). It is only through continued practice and the direct and explicit instruction on advanced literacy skills across disciplines during the middle grades that students will be

able to grow in their "ability to understand, use, reflect on and engage with written texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society" (OECD, 2015, p. 13). Crucial attention must be paid to literacy instruction in grades 4-12 so that all adolescents can be given the "opportunity to develop the necessary tools and skill-sets for ongoing active engagement with different kinds of text, critical thinking, and lifelong exploration and development" (Carnegie Council on Advancing Adolescent Literacy, 2010, p.2).

Research Question

In my own work over the years as an upper elementary, middle school, and high school English teacher I have encountered many students who struggle to comprehend what they read. I have encountered students who had been competent readers in third and fourth grade who were not able to make the jump from early literacy to true comprehension of more complex texts. I have encountered students who can decode, read fluently, and apply phonics rules but cannot comprehend what they are reading. I have also encountered students who are equipped with reading comprehension strategies but are not able to recognize that, even though they finished reading a text, they did not comprehend most of the text. Thus, even if they have had extensive comprehension strategy instruction, if they are unable to identify a breakdown in comprehension, they did not know when to apply a strategy and the tools they had available went unused. All this has led me to ask "How can the reading comprehension skills of middle level readers be improved?"

The application materials included in Chapter III were based on the need to have practical and usable, research-based materials to aid effective comprehension instruction

at the middle level. These materials and approaches are designed to be used both in the English Language Arts classroom and in other disciplines. Chapter III includes a discussion of these instructional tools and approaches and the accompanying examples are found in the appendix.

CHAPTER II: LITERATURE REVIEW

Definition of Reading Comprehension

Before looking at ways to improve students' comprehension monitoring skills, it is important to have an understanding of comprehension itself. Over the years our understanding of comprehension has evolved, beginning with Markman's (1977) initial investigation into the developmental differences in comprehension monitoring of first through third graders when given instructions. One of the first places to start when looking specifically at reading comprehension is Durkin's 1978 landmark study that brought to center stage the idea that if student's reading comprehension is to be improved, reading comprehension skills need to be intentionally taught. As researchers were just beginning to investigate reading comprehension, Durkin's classroom observations revealed that while teachers spent some time talking about reading comprehension, they actually spent very little time teaching students *how* to comprehend a text (1978). Durkin's continued work in and emphasis on the area of reading comprehension led to her defining it as the entire "essence of reading" due to her view that reading without understanding is not reading at all (1993). Continued research solidified Durkin's view that reading comprehension is an intentional and interactive process through which the reader constructs meaning (1993).

Harris and Hodges (1995) built on Durkin's work and offered two definitions of reading comprehension:

(1) The reconstruction of the intended meaning of a communication; accurately

understanding what is written or said. Note: The presumption here is that meaning

resides in the message awaiting interpretation, and that the message received is

congruent with the message sent. (2) The construction of the meaning of a written

or spoken communication through a reciprocal, holistic interchange of ideas

between the interpreter and the message in a particular communicative context.

(p. 39).

The first definition proposed by Harris and Hodges (1995) implies a more passive role for

the reader in comprehending. The idea is that the text holds a message and it is the

reader's job to accurately repeat the stated message. This definition does not allow for

any variance in interpretation across readers nor does it account for the myriad factors

that influence a reader's background or circumstances. The second definition, however,

implies an interaction between the reader and the text. The reader brings his/her own

background knowledge and uses the information given in the text to arrive at a

comprehensive understanding of the text. In this second definition, a reader must play an

active role in creating an understanding of the text and cannot remain a passive receiver

of a singular message. It is this second definition that led Harris and Hodges to clarify the

reader's role in comprehension. They have given the reader the responsibility of

comprehension monitoring, defined as the "noting of one's successes and failures in

developing and attaining meaning" (p. 39). Harris and Hodges also emphasized the active

role of the reader by recognizing the importance of metacognitive awareness while

reading, where the reader knows "when what one is reading makes sense by monitoring

and controlling one's own comprehension" (p. 153).

The RAND Reading Study Group (2002) further built on this idea that reading comprehension is an interactive process by defining reading comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). They emphasized that learning to read is a long-term process where students need to be taught to apply specific comprehension strategies in order to become "self-regulated, active readers who have a variety of strategies to help them comprehend" (p. 14). This definition of reading comprehension is further explained by dividing the reading process into three interconnected elements that occur within the broader sociocultural context of reading: the reader, the text, and the activity or purpose for reading. Proficient readers are able to work within those elements while reading to gain knowledge, apply textual evidence, stay engaged in the reading process, and reflect on what they have read (RRSG, 2002). Sweet and Snow (2003) further clarified the RAND definition by explaining that in including the reader, the text, and the activity in a definition of comprehension, one can account for the reader's background knowledge, ability, and experiences; the quality and type of text; and the purpose for reading, the mental processes involved, and the consequences of reading.

When explaining the reader the RAND Reading Study Group (2002) went on to say that each reader brings his or her own cognitive capabilities, motivation, knowledge, and experience to the task of reading. The cognitive capabilities that readers have include attention, memory, ability to critically analyze, make inferences, and visualize. Motivation includes a clear purpose for reading, interest in the content itself, and a positive view of self as a reader. Knowledge includes knowledge of vocabulary, the topic, linguistic structure, the rules of discourse, and comprehension strategies. Experiences

include past experience with print, discussion of print, and learning from print. These capabilities vary among readers (inter-individual differences) and within an individual activity (intra-individual differences).

Inter-individual differences as defined in RRSG (2002) refer to the variances in ability of each individual reader. These differences come in terms of short-term memory, vocabulary knowledge, and the ability to pay attention to discourse markers. For preschool and elementary readers, the RRSG determined that the primary source of variability comes from differences in the acquisition of word-level skills. Difficulties at the beginning of reading also lead to continued difficulties later on. For adolescent readers, the RRSG identified three keys that affect inter-individual differences. The first is a student's level of belief in his/herself, which in turn determines motivation. The second is what he/she does with new information or information that conflicts with his/her previous knowledge. The third is his/her access to and ability to use information communication technology. For adolescent readers any difficulty in these three areas of inter-individual differences is compounded by difficulties carried over from his/her early reading experiences.

The RAND Reading Study Group (2002) explained intra-individual differences as the differences in how readers apply their individual capabilities in terms of the setting, text, and purpose for reading. Readers with a limited vocabulary will have a difficult time with texts that require a high knowledge of vocabulary. A lack of experience with independent reading will also make for a difficult time reading texts in school. The RRSG also found that a lack of experience applying comprehension strategies and a lack of motivation have a negative effect on comprehension.

To explain the text the RRSG (2002) stated that while reading the reader must construct three models of the text: "the surface code (the exact wording of the text), the text base (idea units representing meaning)" (p. 14) and the mental models that are given in the text (representations given in the text for processing the information). Any difficulty in comprehending the text can come from factors in the text, the reader's background knowledge, and/or the set purpose for reading. Text structure can also help or hinder comprehension, depending on whether or not the interruptions to the text aid in explaining the given text complexities.

The RAND Reading Study Group (2002) defined the activity or purpose for reading as why the reader is reading that particular text. The purpose can be either "externally imposed…or internally generated" (p. 15). Because all three elements are at work at the same time, the set purpose can also change while reading, particularly if the reader's motivation changes or if the original set purpose becomes obsolete when new information is presented in the text. A change in purpose can also have an effect on overall comprehension.

Perfetti, Landi, and Oakhill (2005) argued, with some caveats, for a simple view of comprehension. They initially defined reading comprehension as "the joint product of printed word identification and listening comprehension" (p. 228). The complexities and caveats to this definition arise from *how* this happens. The authors noted that the correlation between listening comprehension and reading comprehension becomes more closely aligned with age. As children are just beginning to read, their comprehension is limited by their ability to decode words. However, as they grow in their ability to decode, their reading comprehension becomes more heavily influenced by their understanding of

spoken language and vocabulary. The authors also noted that this is not a simple, static correlation because reading changes a person's spoken language and because what most people hear in spoken language is vastly different from the vocabulary they encounter when they read.

After looking at a wide range of research on comprehension, van den Broek, White, Kendeou, and Carlson (2009) identified some common themes in reading research to define reading comprehension as the ability to "…translate written code into meaningful language units and to combine these units into a coherent mental representation of the text" (p. 108). From here, they divided comprehension into the cognitive processes that occur during reading (online processing) and the representation of comprehension that takes place after reading has been completed (offline processing). These two processes must work in conjunction in order for the reader to be able to use his/her coherent network of information formed during reading to construct a representative form of the text after reading.

Van den Broek et al. (2009) also explored "standards of coherence," or the means of maintaining a coherent understanding of the text. This built on the earlier work of van den Broek and Kremer (1999), who looked at the cognitive processes involved in comprehension and specifically in making causal and referential inferences. They concluded that the level an individual reader sets for his/her own standard of coherence has a strong impact on how well he/she actually comprehends the text. If the reader does not require that all of his/her inferences produce logical connections between the cause and effect of a situation or among characters in the text, his/her comprehension will suffer. Van den Broek et al. (2009) further clarified that the two most common categories

of coherence that readers attempt to use while reading are causal coherence and referential coherence. Causal coherence involves forming cause/effect relationships using both background information and information in the text. Referential coherence involves making connections about how characters and items within and across the text are related. All of these pieces must come together seamlessly and automatically if successful comprehension is to take place.

The definition of reading comprehension that will be assumed from here on is one that reflects these changes in understanding of the cognitive process of the act of reading and on-going task of constructing meaning from the text. Reading comprehension must take into account the reader him/herself and the bigger context in and purpose for which the reader is completing the reading. The goal of reading comprehension is for a reader to be actively engaged in creating a personal, meaningful representation of a written code. This representation needs to be flexible enough to allow for changes to be made when new information is presented, both while reading and after reading. This self-constructed representation must also be complete enough to allow for the reader to store it in long-term memory so it is readily available for the reader to retrieve later on to apply the information learned from reading to new situations and tasks.

Characteristics and Challenges of Middle Level Readers

Caskey and Anfara (2007) conducted an examination of research on the characteristics of young adolescents. They acknowledged that these findings are generalizations and that development will vary across individuals; however, an awareness of these general characteristics can still be helpful in understanding young adolescents. They found that adolescents undergo a period of extremely dramatic physical

development, second only to their growth from birth to age two. Puberty, along with its onslaught of changing hormones, also occurs at this time. Each person, however, develops at their own rate. These physical changes also bring about a heightened self-consciousness as they compare themselves and their own development to that of their peers.

Caskey and Anfara (2007) noted that adolescent brains are also going through a period of rapid growth. Young adolescents are beginning to develop the ability to argue, apply higher-level thinking skills, challenge authority, and understand figurative language. However, Caskey and Anfara noted that adolescents do not have fully-developed prefrontal cortexes, the area responsible for executive functioning, which includes reasoning, thinking through consequences, decision-making, and sustained attention. This tends to show itself in the form of impulsive and/or immature behavior. Young adolescents are in the process of moving from functioning primarily in concrete operations to being able to process more abstract thought, and as such have little tolerance for trivial responses, from either peers or adults. In other words, when young adolescents have applied higher-level thinking skills related to a particular topic or question, they want to have the time and opportunity to thoroughly explore and wrestle with that topic without being dismissed. However, just as with physical development, this intellectual progress happens at different times for different people.

Caskey and Anfara (2007) also noted that throughout this time, adolescents are developing their own sense of self and individuality, while also trying to maintain their place in their peer group. These opposing goals often cause conflict, both internally and externally, and often result in the so-called "drama" associated with middle school. The

authors also referenced studies that indicated that adolescents tend to be most eager to learn when the topic is interesting, applicable, and relevant to their lives and that adolescents tend to find most academic subjects to fall outside of those categories. While motivation and engagement are key factors for all readers (Cunningham & Stanovich, 2003; Kamil, 2003), they tend to have a greater effect on young adolescents' learning due partly to their concerns about standing out from or being perceived negatively by their peers (Snow & Biancarosa, 2003).

Furthermore, Caskey and Anfara (2007) noted that adolescents also tend to fluctuate between periods of extreme restlessness and periods of extreme lack of energy, stemming mostly from changes in basal metabolism rates. Maslow (1943) identified that humans function within a hierarchy of need, where we prioritize our energy and attention based on the fulfillment of our needs. Meeting our most basic need for physical survival will always come before meeting any other needs. Learning cannot happen when students are hungry, and when hunger satiation is a moving target as it tends to be with middle level readers, sustaining focus on learning tasks such as reading becomes difficult. Middle school also brings an increase in academic demands. Maintaining their personal motivation to follow through with complex academic tasks becomes difficult. As stated previously, these developmental changes all occur at different times for individual young adolescents, meaning that a typical middle school classroom includes students with a range of needs and a range of ability for coping with changes in themselves and in academic demands.

Adolescent readers differ from emergent readers in that they have an established reading history. This reading history includes their previous reading experiences and

ability to read and comprehend as well as their affective response to reading, which includes motivation, enjoyment, and engagement. In 1986 Stanovich identified a pattern in reading histories which he called the "Matthew effects." Successful young readers, or the rich-who-get-richer, establish skills to break the spelling-to-sound code and read texts at their level, leading them to create positive associations with reading. These successful young readers then tend to continue to be exposed to a variety of texts and are able to continue to build their reading ability. However, Stanovich surmised that the inverse is also true, so that those who start out having difficulty decoding words tend to have negative associations with reading. This often means that they are then exposed to fewer amounts of text, in turn meaning they have infrequent opportunities to practice, and when they do read, they waste their mental resources on word recognition instead of being able to focus on building comprehension. For these older struggling readers, these experiences are repeated again and again, making reading an unrewarding task they would rather avoid and thus leaving their reading skills under-developed. A lack of rich reading experiences also means they have had fewer opportunities to build sufficient background knowledge and a rich vocabulary base. These reading difficulties become particularly troublesome for middle level readers whose academic reading often presents information that is contradictory to their preconceptions. Again, if adolescents are not motivated and engaged in reading, they are less likely to benefit from reading instruction and more likely to continue to stagnate (Kamil, 2003; Biancarosa & Snow, 2006). However, it is this "pattern of performance that holds the key to improved reading instruction and, consequently, improved reading ability" (Buly & Valencia, 2002, p. 232).

It is important to note here the important role that vocabulary and background knowledge play in comprehension. In fact, Nagy and Scott (2000) estimated that a reader must know 90% of the words in a passage in order to comprehend it. An assumption can be made that some of this vocabulary knowledge is actually the product of accurate inferring of word meaning (Perfetti, Landi, & Oakhill, 2005). Comprehension requires the use of background knowledge in order to understand both the meaning and the message of the words in context. Numerous studies also point to the importance of background knowledge being compatible with text content in aiding comprehension (Anderson, Reynolds, Shallert, & Goetz, 1977; Rumelhart & Ortony, 1977; Spiro, 1980). However, comprehension is not simply understanding the words on the page or knowing about the subject covered in the text. Perfetti et al. (2005) argued that possessing adequate vocabulary and background knowledge is not enough to improve comprehension. Merely understanding the words in the text does not equate to a cohesive understanding of the text. To actually comprehend a text, the reader must know how and when to apply background knowledge and vocabulary knowledge to aid comprehension. The reader must know when to access background knowledge in order to make inferences about word meanings in context or to make inferences to fill in knowledge gaps. However, troubles arise when the reader's background knowledge conflicts with what is presented in the text. Dewitz and Dewitz (2003) noted that some struggling readers misuse inaccurate background knowledge to fill in gaps left by poor comprehension of the text. At other times, readers fail to use background knowledge to check their comprehension. The primary determinant of comprehension remains the

reader's ability to maintain a high standard of coherence by using working memory for decoding, inferring, and appropriately applying background and vocabulary knowledge.

The International Reading Association (2012) noted that in the 21st century, middle level readers are tasked with reading increasingly difficult texts across a variety of text types and situations and for a range of purposes. These text types include traditional print and non-print resources such as social media, the Internet, video gaming, and texting. The International Reading Association (IRA) also noted that there tends to be a disconnect between the types of reading students do in their own lives and the types of literacy demands they must meet in school. Beyond this, in their academic reading middle level readers are expected to be proficient enough readers to be able to use reading as a tool to gain content area knowledge. As Chall and Jacobs (2003) noted "in order to read, understand, and learn from these more demanding texts, the readers must be fluent in recognizing words, and their vocabulary and knowledge need to expand, as does their ability to think critically and broadly" (p. 14). This expectation requires that middle level readers have a high level of skill in the areas of decoding, fluency, vocabulary, background knowledge, and critical thinking. These more complex texts also demand that content area teachers also be reading teachers, a concept the IRA noted in 1999 after the publication of their position statement in that year. Unfortunately, the IRA noted that 13 years later most content area teachers "continue to feel ill-prepared to support the literacy demands within their discipline" (p. 4). To further emphasize the importance of continued reading skill development in the middle grades, the ACT (2015) found that their 2008 findings continued to be true in 2015 and that "the level of academic achievement that students attain by 8th grade has a larger impact on their

college and career readiness by the time they graduate from high school than anything

that happens academically in high school" (p. 9).

To further understand middle level readers, the National Reading Panel (National

Institute of Child Health and Human Development, 2000) examined reading research on

preventing reading difficulties and identified five pillars of reading instruction: phonemic

awareness, phonics, oral reading fluency, vocabulary, and comprehension. They found

that these could be further divided into three areas. The first area they identified was

knowledge of alphabetic principle. This includes both instruction in phonemic awareness

(the ability to manipulate sounds in oral language) and phonics (the knowledge of letter-

sound correspondence). The National Reading Panel (NRP) also found that phonics

instruction was only effective for students in kindergarten and first grade and only for a

total of 20 hours. For struggling readers in second through sixth grade, continued phonics

instruction did not have a significant impact on students' growth in reading (Kamil,

2003). These findings become even more significant when coupled with Biancarosa and

Snow's (2006) findings that only 10% of struggling adolescent readers have difficulty

with decoding. This leaves oral reading fluency, vocabulary, and comprehension as

relevant skills to be developed in struggling adolescent readers. As the International

Reading Association (2012) quoted their 1999 position statement, "middle and high

school students build on the literacy strategies they learned in the early grades to make

sense of abstract, complex subjects far removed from their personal experiences" (p. 4).

The International Reading Association (IRA) further explained that reading development

occurs in stages and as readers progress, they "increase their reading fluency and adjust

their reading speed according to their reasons for reading. They discern the characteristics

of different types of fiction and nonfiction materials. They refine their tastes in reading

and their responses to literature" (p. 4). So to use the RAND framework, as readers grow

and their environment grows and changes, the texts they read and the reading activities

they engage in evolve as well.

The most recent data from the National Assessment of Educational Progress

(2015) showed that less than 40% of students at the three grade levels tested were reading

at a proficient level, with fourth-graders at 36%, eighth-graders at 34%, and twelfth-

graders at 37%. When compared internationally, the most recent PISA results showed the

United States ranking 24th in reading, a level which has remained mostly unchanged since

2006 (OECD, 2015). Despite these low scores in reading, the National Center for

Educational Statistics found that in 2017, 83% of ninth graders graduated within four

years of beginning high school, which is the highest graduation rate since data collection

began in 2010 (Gebrekristos, Zhang, Rathbun, Barmer, Bullock Mann, & Hinz, 2017).

However, according to the most recent ACT data, only 44% of these ACT-tested high

school graduates actually met ACT College Readiness Benchmarks in reading (2016).

This means that although more students are graduating from high school, more than half

of them cannot read well enough to be adequately prepared for college or their chosen

careers.

The Role of Engagement and Interest/Motivation in Middle Level Readers

The idea that engagement is a critical component of learning is not new.

Engagement has been emphasized by constructivist learning theorists from Vygotsky to

Piaget to Dewey to Bruner. If a student is involved in asking questions and inquiring

throughout the process of learning, they will be able to use their past experiences and

existing knowledge to discover facts and create connections between new and background information. It is practice with this process of discovery that makes it so one is able to "generalize what one has learned into a style of problem solving or inquiry that serves for any kind of task one may encounter—or almost any kind of task" (Bruner, 1961, p. 8). The RAND Reading Study Group (2002) also noted that each reader's motivation, along with his/her greater reading environment, produces great variability in reading ability. Caskey and Anfara (2007) in their review of research on adolescent development found that a high level of engagement is critical for adolescent learning. A high level of student engagement is also implied in each of Hattie's top four influences on student learning (2015), which include teacher estimates of achievement, collective teacher efficacy, self-reported grades, and Piagetian programs.

Csikszentmihalyi (1990) explored this idea of engagement by calling it "flow." Csikszentmihalyi defined flow as "the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost; for the sheer sake of doing it" (p. 4). When flow is achieved there is not enough attention left over to monitor anything else and even one's awareness of identity disappears. Csikszentmihalyi identified seven conditions that are present when flow is achieved. The first is that we are completely involved in and focused on the activity. The second is a sense of ecstasy from being outside of everyday reality. The third is great inner clarity, where we know what to do and the activity provides immediate feedback on how well we are doing. The fourth is the knowledge that our skills are adequate for the task. The fifth is a sense of serenity, where our worries about ourselves disappear. The sixth is a sense of timelessness so that hours seem to pass in

minutes. The seventh is that the activity creates intrinsic motivation because the activity is its own reward. These occur across disciplines, cultures, economic status, and age.

Csikszentmihalyi (1990) further explained flow by looking at two specific aspects of the activity and the participant: the amount of challenge the activity requires and the level of skill of the participant. Quantifying these two aspects can predict a person's flow channel. The optimum flow channel occurs when both the skill required is high and the challenge of the activity is high. When we are learning a new task that is just beyond our current skills, the challenge is high and our current skills are not quite adequate. This is the area Vygotsky (1978) called the zone of proximal development and is where instruction is most beneficial for each student. Just beyond the zone of proximal development (ZPD) is where the skills have been mastered but the challenge is still high. This zone is Csikszentmihalyi's flow channel. However, when the skills required are too far out of reach and the challenge remains high, that creates anxiety. Neither learning nor flow can be achieved when both the challenge and the skills required are low. This situation creates boredom or even apathy. When the skills and challenge required are in a middle range, you are comfortable with the task but not in flow.

When flow theory is applied to reading, flow is achieved when the text is challenging and the reader's skill is high. This is when reading becomes so enjoyable that you get lost in the world of the text and you read for the pleasure you get from reading. The idea that students will read for pleasure is an expectation that is often set for adolescents. However, given that less than 40% of students in grades four, eight, and twelve read at a proficient level (National Assessment of Educational Progress, 2015), very few students have ever experienced flow in reading.

Dweck (2006) also noted the role of engagement in her research on success. Dweck found a strong connection between adolescent engagement and choices and that they tend to "mobilize their resources, not for learning, but to protect their egos" (p. 58). This need to protect their egos is actually rooted in a fixed mindset. Dweck explained this idea of two mindsets by determining that there are two meanings to ability: "a fixed ability that needs to be proven, and a changeable ability that can be developed through learning" (p. 15). Dweck calls these the fixed mindset and the growth mindset. In a fixed mindset, failure is seen as a means of exposing your weakness and something to be avoided at all costs. Having to put forth effort means that your innate ability is not good enough. On the other hand, in a growth mindset, the focus is on challenging yourself to learn something new. A growth mindset holds the belief that your qualities can be developed through effort and that if a task was completed without effort, nothing was learned. In fact, "effort is what *makes* you smart or talented" (p. 16). In essence, this implies two different definitions of success. In a fixed mindset, success is the only goal and only smart, talented people succeed. In a growth mindset, success is getting smarter in the process of trying new challenges, because learning, not the success itself, is the goal. When the growth mindset is employed, engagement occurs and intrinsic motivation is developed. As the skills needed to complete the challenging task are honed, Csikszentmihalyi's flow can be achieved.

Bruner (1961) also hinted at a growth mindset when he suggested using success as a gauge rather than an end goal when he noted that one can "treat success as indicating that he is on the right track, failure as indicating he is on the wrong one" (p. 6). Bruner also noted the strong connection between figuring things out for oneself and the ability to

retrieve that information for later use. This further emphasizes work of van den Broek, White, Kendeou, and Carlson (2009) with online processing (what the reader does during reading) and offline processing (the representation of comprehension the reader creates after reading). In order to create a representation of what one has read after reading, the reader must be able to focus and remain engaged during reading. If engagement is not high, fluency suffers, which in turn prolongs the time spent on reading the text. The longer it takes to get through a passage, the longer that information must sit in short-term memory, waiting to be filed correctly in long-term memory. This becomes taxing and the ability to retain that information for long-term storage decreases. This causes an overall decrease in reading comprehension. However, if online and offline processing work seamlessly, the storage of this information will be timely and storage can be logical and organized for later retrieval. As Bruner (1961) stated "the very attitudes that characterize 'figuring out' or 'discovering' things for oneself also seem to have the effect of making material more readily accessible in memory" (p. 9). In other words, if students are engaged in the work on discovery and inquiry themselves, they will be much more likely to learn and then be able to transfer and use that learning later. Students and teachers need to be willing to "ride out short-term mistakes, take risks, accept a certain amount of confusion and error, and remain confident that things will in time come to seem easier" (Heller & Greenleaf, 2007, p. 14).

Strategies for Teaching Reading Comprehension

The idea that reading comprehension can be improved by teaching specific strategies began with Durkin's 1978 landmark study on reading instruction. Durkin found that in 4,469 minutes of reading instruction in grade four, only 20 minutes of reading

instruction actually occurred. Even though research at the time indicated that comprehension instruction was important, Durkin found there was a definite lack in actually teaching, modeling, explaining, or demonstrating specific strategies for students to use to improve their comprehension. Unfortunately, even with this knowledge of the importance of teaching metacognition and reading strategies, 20 years later, Pressley et al. (Pressley,Wharton-McDonald, Hampston, & Echevarria, 1998) found that little had changed in reading instruction and that teachers were still assessing comprehension without teaching students how to improve their comprehension.

In viewing reading as a cognitive process it is important to start with the work of John Flavell. Flavell (1979) in his research on metacognition concluded that building metacognitive awareness is important and stated "increasing the quantity and quality of children's metacognitive knowledge and monitoring skills through systematic training may be feasible as well as desirable" (p. 910). Biggs (1978) further clarified metacognition by coining the term "metalearning" to refer to the specific kind of metacognition required during learning and defined it as being the "particular metacognitive processes involved in learning and studying" (p. 75). He further explained that these processes are the ones specifically "relating to students' awareness of their motives, and control over their strategy selection and deployment" (p. 75). In reading comprehension, metacognition plays a role both as one reads smoothly and as one applies strategies to correct comprehension breakdowns. In other words, monitoring comprehension is really about controlling attention and engagement. Furthermore, if an awareness of metacognition is not developed early on, most students will develop elaborate strategies to mask their actual reading deficiencies (Block, 2005).

If metalearning and metacognition can be both taught and improved, then it is logical to conclude that instruction must be scaffolded. Scaffolded or proleptic instruction began with an understanding of Vygotsky's zone of proximal development. This then developed into Pearson and Gallagher's (1983) gradual release of responsibility, then to Palincsar and Brown's (1984) reciprocal teaching, and then to Collins, Brown, and Newman's (1989) cognitive apprenticeship. All of these models are rooted in the idea that learning happens in phases, with the learner gaining knowledge from a mentor who possesses more knowledge and experience and that instruction should be scaffolded as the learner's ability and understanding increases. Biggs and Collins (1982) proposed the SOLO taxonomy (**S**tructure of the **O**bserved **L**earning **O**utcome) to evaluate the quality of student responses as their learning progresses. The idea was to emphasize level of understanding as demonstrated in student-generated responses rather than in the level of teacher-constructed questions such as measured by Bloom's Taxonomy or Webb's Depth of Knowledge. The SOLO levels include prestructural, uninstructional, multistructural, relational, and extended abstract. These five levels can also be used in describing the process through which students learn. This focus on learning as a process is really a transition from teaching for assignment completion to teaching for understanding, where the emphasis is on what and how students are thinking and where understanding is the goal of thinking.

Hattie (2012) built on this idea by identifying three levels of learning: "ideas, thinking, and constructing" (p. 26) or surface versus deep learning. Both are needed and students must progress systematically from one to the next and move from the acquisition of knowledge to the consolidation of knowledge. In the acquisition period, the learning

goal is to summarize and outline the topic. In the consolidation period, the learning goal is to test your knowledge as you apply it in different situations. Hattie noted that it is tempting for teachers to launch into the consolidation period without spending adequate time in the acquisition period. However, students cannot successfully engage in problem-based learning unless they first gain the adequate knowledge and skills to do so. A balance between time spent in acquisition and consolidation must be achieved. When Bintz and Williams (2005) looked at the type of comprehension questions asked by fifth and sixth grade reading teachers, they found that 54% of these questions were at the basic recall level. Comprehension will not improve if questioning and instruction remain at the basic level. In fact, Hansen (1981) found that the type of questions, whether literal or inferential, students were asked after reading influenced the type of information they focused on during reading, so continuing to focus on basic recall questions reinforces the habit of only focusing on literal information.

In an effort to identify which practices have the greatest effect on student learning, Hattie (2015) completed an analysis of nearly 1200 meta-analyses and analyzed the effect of 195 practices. The top five practices with the greatest influence on student learning are teacher estimates of achievement, collective teacher efficacy, self-reported grades, Piagetian programs, and conceptual change programs. Teacher estimates of achievement and collective teacher efficacy reinforce Dweck's idea of a growth mindset. If a teacher believes that a student can achieve or even exceed the expectations that are set for them, the student will make progress. If teachers believe that what they are collectively doing will have a direct impact on student learning, then students will make improvements. These are both rooted in the idea that a student's ability or traits are not

set but that they can be improved. Self-reported grades imply that students are engaged in self-monitoring and self-assessment. This means that students have a solid understanding of what the learning goals are, how to achieve those goals, and an awareness of their progress toward achieving those goals. A Piagetian program is one that is built on constructivist theory, the idea that learning progresses as knowledge and skills are passed from a mentor to the student, with the overall goal of the student being able to complete tasks independently. It also holds the idea that the focus is on the learning process and not the outcomes. A conceptual change program is one in which students examine misconceptions as well as engage in deeper level learning. Woven through all five of these is an emphasis on a high level of student engagement, a belief that both teachers and students are learners, the goal of learning is deep understanding, and that learning is a process in which metacognition plays an important role.

In any discussion of how to improve reading comprehension and specifically which strategies have a direct impact on improving comprehension, it is important to begin with Palincsar and Brown's 1984 study on comprehension. Palincsar and Brown (1984) noted that after decoding has been mastered, comprehension is helped by so-called reader-friendly texts, an overlap in the reader's background knowledge and the content of the text, and application of strategies to aid comprehension. The authors then reviewed research on reading education and remediation and found evidence for the teaching of six strategies: 1) understanding the implicit and explicit purposes for reading, 2) activating background knowledge, 3) appropriately allocating attention, 4) evaluating the text for consistency, 5) monitoring comprehension, and 6) making inferences. The authors combined these into four concrete activities that both enhance and check

comprehension during reading. These four activities require active reading. These became the four components of reciprocal teaching: summarizing, questioning, clarifying, and predicting. This model of reciprocal teaching involved the teacher modeling each of these four activities and offering feedback on the students' success with them until the students are able to successfully and independently engage in these activities with each other. If a student was unable to meet the success criteria, it was attributed to a breakdown in comprehension rather than an inability to perform that particular skill in isolation. The solution for this comprehension breakdown was to adjust instruction and help students by clarifying or having them reread the text.

Dole, Duffy, Roehler, and Pearson (1991) were also successful in identifying five specific strategies that are research-supported and also met the criteria of being consistent with a cognitive view of the reading process, can be differentiated across reading abilities, and can be taught in the classroom. They are 1) determining importance, 2) summarizing information, 3) drawing inferences, 4) generating questions, and 5) monitoring comprehension. Determining importance is defined as differentiating important information from non-important information. The authors point out that this can be either author-determined importance or reader-determined importance but that the majority of academic reading relies on identifying author-determined importance. Implied in this skill is an understanding of text structure, both in narrative and expository text. Summarizing information is different from determining importance in that when summarizing the reader must take the important information given in the text and "create a new coherent text that stands for…the original" (p. 244). Drawing inferences is defined as constructing meaning by filling in "details omitted in [the] text and elaborate [on] what

they read" (p. 245). The authors emphasize that inferential activities should happen in conjunction with literal comprehension to improve comprehension rather than mastering literal comprehension first. Generating questions refers to student-generated questions. The authors pointed to multiple studies that showed that students needed to receive training in how to generate effective questions before this strategy proved useful in improving comprehension. Monitoring comprehension, as they define it is a two-part process of both "being aware of the quality and degree of one's understanding and knowing what to do and how to do it when one discovers comprehension failures" (p. 247). The authors also suggest that not only should comprehension monitoring be taught, but it is this very strategy that distinguishes good readers from poor readers. It is this constant monitoring of comprehension that restores comprehension when there is a breakdown. Palincsar and Brown (1984) referred to these two states as automatic and strategic. An automatic state is when the reader is able to read seamlessly and relatively effortlessly. The reader then periodically enters a strategic state when he/she notices that there has been a comprehension failure and he/she slows down in order to apply active fix-it strategies until the failure has been remedied, when he/she returns to an automatic state. It is having a wealth of fix-it strategies to apply when comprehension breaks down and knowing when and where to look back through a passage that elevates a good reader who is struggling to comprehend a passage to a good reader who successfully comprehended a passage. This is similar to the Paris et al.'s (Paris, Lipson, & Wixson, 1994) distinction between a reading skill and a strategy. A skill is an automatic process that is applied unconsciously. A strategy is applied intentionally for a specific purpose, such as fixing a comprehension breakdown. As Zipke (2007) noted when studying

comprehension in sixth and seventh graders, comprehension monitoring is not only

knowing "when they have not understood a text but what to do to correct that failure" (p.

389).

In an effort to synthesize studies on reading strategies and pinpoint specific

comprehension strategies to focus on for instruction, the National Reading Panel

(National Institute of Child Health and Human Development, 2000) analyzed 203 studies

of comprehension strategy instruction with students in grades four through twelve. They

found research to support the use of eight specific strategies for comprehension

instruction. These strategies are comprehension monitoring, cooperative learning, graphic

organizers, story structure, question answering, question generating, summarization, and

the use of multiple strategies simultaneously. While this list is helpful as a starting point

for instruction, some would argue that cooperative learning is an instructional method

and that the use of graphic organizers is a teaching tool rather than a comprehension

strategy. The use of multiple strategies simultaneously is also not a specific strategy but

the application of other specific strategies. This leaves comprehension monitoring,

understanding story structure, question answering, question generating, and

summarization as actual strategies to be taught.

De Corte, Verschaffel, and Van De Ven (2001) conducted an examination of the

extensive body of research on reading instruction. When they concluded that the more

recent research continued to support Durkin's (1978) initial research findings that

teachers spend very little time explicitly teaching comprehension strategies, the authors

decided to examine the effects of teaching the four reading comprehension strategies of

1) activating prior knowledge, 2) clarifying difficult words, 3) making a schematic

representation of the text, and 4) formulating the main idea of the text as well as the

metacognitive strategy of regulating your own reading process as opposed to a teacher

regulating strategy application. Their qualitative study looked at 149 ten to 11 year-old

fifth-grade students. There were four classes in the experimental group and four classes in

the control group. These students were chosen because they were representative of the

mixed gender, mixed socio-economic status of the city of Leuven, Belgium. For the

experimental group, instruction in the five strategies was conducted over four months in

24 lessons of 50 minutes each. Students were given a standardized Reading

Comprehension Test, a Reading Attitude Scale, a Reading Transfer Test, a Reading

Strategy Test, and an interview on strategy used during reading at the pre-test stage to get

a baseline on student ability. Students were introduced to one strategy at a time but once

two strategies were introduced, students were required to apply the new strategy and all

previously learned strategies simultaneously. Instruction included teacher modeling,

whole class discussion, and small group work. Teachers were given training in strategy

instruction prior to the study. The students were assessed a few days after each strategy

lesson and then again after the intervention was applied. Nine students from each class

were also interviewed at the close of the study.

Upon completion of the 24 lessons and post-tests, De Corte et al. (2001) found

that the students who received instruction on reading strategies performed better than the

control group on the Reading Strategy post-test. The experimental group also did slightly

better than the control group on the Reading Comprehension post-test. The authors also

acknowledged that this overall increase could also be due to the experimental group's

higher scores on the initial pretests. Both the student interview and the Transfer post-test

indicated that the students who received instruction on reading strategies were able to successfully apply the use of reading strategies to other texts, leading the authors to conclude that instruction on reading strategies improved students' ability to apply strategies while reading.

The following year Duke and Pearson (2002) also examined research on reading comprehension and found evidence for the same six individual comprehension strategies as the National Reading Panel, calling the strategies slightly different names: prediction/prior knowledge, think-aloud, text structure, visual representations, summarization, and questions/questioning. The authors then combined the individual comprehension strategies into three comprehension routines to emphasize that it is a set of applied practices that aid comprehension. The first routine is Palincsar and Brown's reciprocal teaching; the second is transactional strategies instruction; and the third is based on Isabel Beck and Margaret McKeown's Questioning the Author (Beck, McKeown, Hamilton, & Kucan, 1997).

Explanation of these routines will begin with transactional strategies instruction as Palincsar and Brown's reciprocal teaching has already explained previously. Duke and Pearson's (2002) transactional strategies instruction refers to the practice of teaching a package of strategies in a transactional manner, meaning interactions among the teacher, student, and the text. This instruction happens through explicit instruction and teacher modeling such as think-alouds. Students apply strategies across a variety of texts and strategy application must adjust as needed according to the text and situation. Throughout all of this, students are given feedback on their strategy use and instruction is adjusted as needed.

Duke and Pearson's (2002) third routine is Beck and McKeown's Questioning the Author. Students are taught to ask a series of questions to aid comprehension. The questions fall into categories that include initiating instruction, focusing on the author's message, linking information, identifying how the information was presented, and referring to the text (p. 230). Throughout this routine students are encouraged to bring a critical eye to the text and concede that "comprehension failure may have as much to do with the author's failure to provide a considerate message" (p. 231) as much as it has to do with the reader's failure to comprehend.

In their study Dewitz and Dewitz (2003) determined that the primary problem for the struggling reader they assessed was his/her inability to make inferences at the sentence level, paragraph level, and overall text level. The ability to make inferences is the key to making meaning from text, regardless of whether inferences are viewed as a meaning construction strategy, the glue that holds all meaning making together, or as a means of making a network of relations. The authors went on to divide comprehension strategies into the three categories of strategies that operate to promote, direct, or evaluate inferences. Predicting and self-questioning fall into the category of promoting inferences. Strategies that direct inferences would include visualizing, determining importance, and summarizing. The evaluation of inferences would come in the form of comprehension monitoring. In this view, strategy instruction is an "indirect force on cognition" (p. 432) that encourages readers to be thoughtful as they simultaneously read and monitor their comprehension. While comprehension monitoring cannot be forced on someone, strategies that require thoughtful reading tend to make students more apt to monitor their own comprehension.

Perfetti, Landi, and Oakhill (2005) found that making inferences and comprehension monitoring both contribute to and result from the reader's ability to make a cohesive representation of the text and that for comprehension to improve "the reader must adopt a high standard of coherence" (p. 247). When the reader's standard of coherence is high, comprehension monitoring is happening automatically, inferences are being made, and interest in reading remains high. Being actively engaged in constructing meaning improves comprehension and makes reading more enjoyable. This in turn results in more reading, which improves overall reading comprehension. This led the authors to identify three key factors that influence comprehension: "sensitivity to story structure, inference making, and comprehension monitoring" (p. 230). Throughout the process of building a representative model of the text message, the reader must both identify words and apply language processing mechanisms to translate these words into understandable messages. This is both a process of retrieving meaning and inferring which meaning is being used in the text, or accurately applying prior knowledge, which includes content and vocabulary knowledge.

In other words, 33 years after Palincsar and Brown's (1984) introduction of reciprocal teaching, the research continues to indicate the four strategies of summarizing, questioning, clarifying, and predicting, are keys to improving metacognition and in turn improving reading comprehension. These studies all seem to indicate that reading strategies are applied during self-monitoring of comprehension and that instruction aimed at improving both strategy application and comprehension monitoring is mutually beneficial. Comprehension instruction should focus on improving metacognition by engaging the reader in asking and answering questions, both explicit and implicit, and

using the text structure in an effort to summarize and create a representation of the text. Metacognition is important in all kinds of learning and should be one goal of literacy instruction so that the reader is able to both extract and construct meaning from the text. This requires that the reader be aware of how well he/she understands while he/she is reading and be able to employ fix-it strategies when comprehension breaks down. The end result is that the reader has a mental representation of the text stored in their long-term memory for use later on. In teaching this way, teachers need to be aware of what basic knowledge each individual reader brings and an awareness of how well each reader can apply these skills to reading. In other words, the teacher needs to take into account each reader's prior knowledge and "monitor students' use of comprehension strategies and their success at understanding what they read" (Duke & Pearson, 2002, p. 212). The teacher's role is to facilitate movement from acquisition to consolidation as each reader learns to both read automatically and apply specific strategies as he/she notices and encounters a comprehension breakdown. This comes in the form of modeling specific strategies, allowing time to practice reading, and providing feedback on how well students are progressing toward specific and tangible reading comprehension goals.

Effective Measures of Reading Comprehension

When it comes to current assessment practices, most schools require standardized testing, data collection, and progress monitoring in order to demonstrate accountability for student progress, teacher competency, and overall school performance. What this looks like at individual schools varies. Most schools follow the three-tiered approach of Response to Intervention (RTI), with some combination of professional learning communities and a data-driven assessment approach. A key component of the three-tiered

approach of RTI is progress monitoring. Progress monitoring in the classroom typically includes both curriculum-based measures and curriculum-based assessments. Curriculum-based measures (CBMs) are criterion-referenced standardized assessments that measure students' progress toward specific criteria or progress markers (Deno, 1992). Curriculum-based assessments (CBAs) are teacher-developed assessment tools that measure a student's performance on the content being taught.

With this need for accountability there comes a multitude of audiences with a variety of purposes in seeking assessment information (Brenner, Pearson, & Rief, 2007). To this end there are many tests available for measuring reading comprehension in the middle grades. Commonly used tests for evaluating individual students include the Gates-MacGintie Reading Test, Woodcock Reading Mastery Test, Test of Reading Comprehension, and Diagnostic Assessment of Reading. School-wide assessments that include a section on reading comprehension include Northwest Evaluation Association Measures of Academic Progress (NWEA MAP), National Assessment of Educational Progress (NAEP), ACT, EXPLORE, and PISA. At the classroom level, CBAs are also often used, along with anecdotal evidence of student progress.

This nationwide emphasis on accountability has helped to shift the focus from teaching to learning and to emphasize the products and the processes of learning rather than activities or curriculum coverage. This shift also welcomes the use of McTighe and Wiggins' Understanding by Design (UbD) or backward design approach (2004). When paired with DuFour's four essential questions for learning, the UbD approach helps teachers and schools to clearly outline the learning targets, define success criteria, set high expectations, and lay out a plan for frequent practice opportunities and timely

feedback. This approach begins with answering DuFour's (DuFour, DuFour, & Eaker, 2008) four questions: 1) What do we want them to know and be able to do? 2) How will we know they are learning? 3) How will we respond when they don't learn? and 4) How will we respond if they already know it? After identifying the end goal the next phase is outlining instruction that will prepare students to be able to demonstrate their knowledge, understanding, and skills. This means that a well-rounded view of assessment includes assessments of learning, for learning, and as learning. At the heart of this is the curriculum-assessment-instruction (CAI) connection, where the three interdependent components work together to ask the question "based on what I learn from formative assessment about where my students currently are in relation to our key goals, what teaching and learning plans will best help each of them move forward?" (Tomlinson, Moon, & Imbeau, 2015, p. 3). This is supported by Hattie's (2015) findings that self-reported grades have an effect size of 1. 33 and feedback has an effect size of 0.73 on student achievement.

In all discussion of assessment the primary audience must remain the student. After this, the audiences include parents, teachers, administrators, and the broader community. When the assessment is approached in a constructivist and inquiry framework, assessment becomes "the exploration of how the educational environment and the participants in the educational community support the process of students as they learn to become independent and collaborative thinkers and problem solvers" (IRA–NCTE Joint Task Force on Assessment, 2010, p. 2). The goal should be to help each student understand how he/she is doing in relation to clear success criteria and what to do next. This then means a variety of assessments must be conducted regularly, including

formal/informal, norm-referenced/criterion-referenced, formative/summative, teacher-directed and student self-assessment. Throughout all this, both the teacher and student must be able to clearly articulate what is working best and how well he/she is progressing toward the learning targets (Fisher, Frey, & Hattie, 2016). Regardless of the audience, purpose, or form, all assessments should provide specific, timely feedback in answer to the questions posed by both DuFour and in UbD that identify what we want students to be able to know and do as well as what evidence will demonstrate mastery.

Given that both reading and learning are processes, assessment of reading comprehension should communicate information on students' progress toward specific learning targets. Hale, Henning, Hawkins, Sheeley, Shoemaker, Reynolds, and Moch (2011) conducted a study to examine the validity of four commonly used CBMs of reading comprehension at the middle level, including Maze assessment, comprehension questions, Maze accurate response rate (MARR), and reading comprehension rate (RCR). They compared the students' scores on the four measures of comprehension against students' scores on the Woodcock-Johnson III Tests of Achievement (WJ-III ACH) Broad Reading Cluster Score. The authors wanted to identify CBMs that could be accurately used in progress monitoring in the middle level. They also cited studies that indicated that words correct per minute (WCPM) becomes decreasingly accurate in the middle and high school levels and wanted to test this as well. The authors assessed 77 students in grades six, seven, and eight from a private school in the Southeastern US. Hale and colleagues tested each student in three testing sessions across five school days. They found that of the four predictors, the MARR and RCR had significant correlations to the WJ-III ACH Broad Reading Cluster Score, with the MARR results showing

criterion variable of β = .26, p < .05 and RCR results showing β = .52, p. <.01. Their study also indicated that WCPM was not a significant predictor of WJ-III ACH Broad Reading Cluster Score with criterion variable of β = .15, p > .05. This finding supported previous studies that indicated WCPM is not as accurate in the middle grades.

Dewitz and Dewitz (2003) advocated for the use of the Qualitative Reading Inventory 3 (QRI-3) in assessing reading comprehension. They found that the Wechsler Intelligence Scale for Children-III did not give them enough information on the cause of comprehension issues for the struggling reader they assessed. It was a thorough analysis of the student's responses to comprehension questions that led them to identify the types and causes of his errors. These included difficulty in making relational inferences, creating causal inferences, understanding syntax, relying too heavily on prior knowledge, and lacking vocabulary knowledge, all of which are components of reading comprehension. Once these errors were identified, the authors were able to create instruction that targeted his specific needs and improve his comprehension.

Dole, Duffy, Roehler, and Pearson (1991) also concluded from their study that it is not beneficial to merely assess comprehension by asking comprehension questions of students without unpacking the underlying process and the specific reasoning involved in arriving at the correct answer. This is similar to Durkin's (1978) classification of the teachers she observed as merely "being mentioners, assignment givers and checkers; and interrogators" (p. 50). Instead, Dole et al. proposed that teachers use informal assessments of to provide information for the teacher to use to then restructure their understanding. It is this scaffolding of instruction that happens spontaneously as teachers adjust based on information gained from students so that students can restructure their

own learning. This should happen not just within a single lesson but also across multiple lessons and time in order for students to generalize the independent application of reading strategies. This solidifies the CAI connection and brings everything back to a focus on learning. Because reading is an active process that requires metacognition in order to read for meaning, students must constantly self-assess their ability to make meaning. Assessment of reading comprehension needs to include self-assessment and teacher assessment of each student's progress toward independent application of strategies to aid comprehension across texts. This really requires insight into how students are thinking and not just whether they are able to correctly answer comprehension questions. If the emphasis shifts to having students make their thinking visible and in turn to Hattie's visible learning, this fosters Dweck's growth mindset as students view assessment as feedback on their progress with "focusing on key learning targets, reflecting on their own work in regard to those targets, setting goals and timelines for their learning, and providing meaningful feedback to one another" (Tomlinson, Moon, & Imbeau, 2015, p. 8).

CHAPTER III: APPLICATION MATERIALS

I currently teach at a middle school in a district that is located in a suburb of the Twin Cities Metro. This school serves students in grades six through eight. The student population includes about 26% percent students of color and approximately 15% who receive free lunch. My teaching assignment for the past two years and going forward is 7th grade English Language Arts. I work on a team with two other 7th grade ELA teachers. Students are offered either an on-grade-level ELA course or an advanced ELA course. Beyond that, interventions are offered for students in the on-grade-level ELA course. This school's approach to reading intervention has changed over the years. In previous years students who were identified as potentially benefiting from reading intervention were placed in a reading class in addition to their on-grade-level ELA course. Students were identified based on standardized test scores, teacher recommendations, and their previous academic work. Once students were placed in this course their progress was monitored to determine when they would be able to exit the intervention.

Moving forward, this school will adopt a push-in/pull-out (PI/PO) model for reading intervention. This will allow for more needs-based, targeted instruction (Buly & Valencia, 2002). Instruction could be centered on a specific skill or strategy, where small groups of students are pulled out for practice. Students may also receive additional small-group instruction within their on-grade-level ELA course. This will require regular communication with the students' ELA teacher and other content-area teachers for feedback on how the students are transferring the knowledge and skills learned in PI/PO

to their other courses. The idea of the small-group approach is also to provide students with a low-pressure environment for them to feel empowered to work on skills they need to become better readers. Part of this will be creating an environment that promotes a growth mindset (Dweck, 2006), where students feel that the learning objectives are reachable.

In previous years, the three main things we focused on throughout the 7th grade ELA course were 1) Greek/Latin roots, 2) using textual evidence to write a claim, and 3) making inferences. We covered these through reading a variety of narrative and expository texts. Students wrote responses to literature, short stories, and written analyses throughout the units each year. Each unit was briefly outlined in terms of the resources available, the learning objectives, and the common assessment that would be used. Each teacher had autonomy to decide how to carry out instruction towards these goals while ideas and resources were shared.

Going forward, our team has decided to shift our focus slightly. The three main areas will be 1) using textual evidence to write an argument to support a claim, 2) making inferences, and 3) defining/analyzing literary terms. This change will allow us to focus on vocabulary in the context of the text. We will still look at Greek/Latin morphemes, but this change will allow us to include a wider variety of vocabulary terms including literary terms and poetic techniques. This will also allow us to discuss the effect word choice has on the overall text. We will continue to read a variety of narrative and expository texts, including fiction and nonfiction. With the continued emphasis on making inferences and using textual evidence to write and support a claim, improving comprehension can continue to be a primary focus for instruction.

In terms of improving comprehension for 7th graders, I propose an approach that takes into account a cognitive view of the reading process, constructivist theory, Dweck's growth mindset, and Hattie's 2015 top influences on student learning. This means creating an environment where students are highly engaged in learning. Within this environment students will have opportunities to master surface level learning and then dive in for deeper learning, where they are given the opportunity to discover and construct meaning for themselves. This requires that the learning targets be clear from the onset and that regular, specific feedback be provided on each individual's progress toward the learning targets. This involves teacher modeling and scaffolding of instruction, where a challenge is seen as a welcome opportunity to grow. It also includes helping students develop realistic self-evaluation skills so that each individual understands where they are in relation to the end-goals and what to do to make that progress and growth, along with what to do and how to problem-solve when things go awry.

One important component of comprehension instruction is read-alouds. Read-alouds give students an opportunity to receive the message of the text without having to struggle through it themselves. This is when the magic of the page can come alive for them. Modeling fluent reading through read-alouds is one way to demonstrate success criteria. If students are able to hear what fluent reading sounds like, they are better able to copy that in their own reading. In fact, Anderson, Reynolds, Shallert, and Goetz (1985) stated "the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children" (p. 23). Researchers and educators alike point to the benefits of read-alouds for adolescents (Allen, 2000). These

benefits include improving comprehension, fluency, attitudes toward reading, and increased propensity to engage in independent reading (Albright, 2002; Albright & Ariail, 2005; Ariail & Albright, 2006; Ivey, 2003; Lesesne, 2006; Trelease, 2006). Read-alouds provide exposure to new texts and authors, story structure, rich language, and new knowledge while demonstrating a personal love of reading.

Another way to model effective reading behaviors is a think-aloud. The purpose of this strategy is to identify what good readers do while they read. Think-alouds give teachers an opportunity to make their own thinking visible. Teachers are able to model how to establish a high standard of coherence and how to maintain that high standard of coherence throughout the reading (van den Broek, White, Kendeou, & Carlson, 2009). By sharing aloud the thought processes involved in constructing meaning, comprehension becomes more accessible and thinking becomes visible (Ritchhart, Church, & Morrison, 2011). Once students can hear what good readers think about while reading, they are better able to transfer that kind of thinking to their own reading. Students can then practice this strategy with a partner, either orally or by writing on sticky-notes or in two-column notes. Think-alouds can be used to model making inferences, monitoring comprehension, fix-it strategies, asking questions, making predictions, summarizing, clarifying, and many other behaviors good readers engage in during and after reading.

Given Nagy and Scott's (2000) estimate that students must understand 90% of the words in a text in order to understand it, another key component of comprehension instruction is vocabulary instruction. One graphic organizer that I have found successful with a variety of age groups is found in Appendix A. With this approach, students are given the word and the definition. After hearing the definition, the students identify the

key parts and write the definition in their own words. This is a key component because it requires that students think about the definition rather than just copying the definition that was provided. This moves defining the word from a passive task to an active task. The next column is for students to record an example of the word in context. This is particularly helpful when the word is related to academic content. For instance, an example could be a poem where the poetic element is used or words that are nouns. The last column is for students to identify a way for them to remember it. These often include mnemonic devices and visual representations. This is also a great opportunity for students to share ideas with each other for how to retain this new knowledge. The key to this is that they think of a strategy or a connection to help solidify this knowledge. Another common addition to this chart is a column for non-examples. This can be helpful when multiple terms that are covered together have similar definitions and a clear distinction needs to be made.

One of the first strategies we teach at the beginning of the year is close reading. Close reading has been shown to be an effective strategy for teaching analytic reading (Frey & Fisher, 2013). We do this early in the year to help students understand specific things to do when reading a difficult text. The format that we use is Summarize, Comment, and Underline (SCU) (see Appendix B). Students underline important ideas and answers to focus questions as they read. They also record notes in both margins. On the Summary side they record notes on the main idea and supporting details that will help them write a summary at the end of each section. On the Comments side, they record comments they have about the text as they read, including questions, reactions, evaluations, and comparisons. By recording their summaries and comments students

learn to apply multiple fix-it strategies as they monitor their comprehension and evaluate their understanding of the text.

In conjunction with teaching the SCU close reading strategy, I would specifically teach how to write a summary paragraph. When working with a narrative text, the Somebody Wanted But So strategy (Appendix C) could be a really useful framework (MacOn, Bewell, & Vogt, 1991). The Somebody Wanted But So (SWBS) strategy gives clarity for what to include in a summary of a narrative text. SWBS also provides an opportunity to discuss characterization, plot progression, conflict, and resolution. After this graphic organizer has been completed, students use the summary statements and put them into a summary paragraph. SWBS is particularly for struggling readers and English Language Learners; however this framework also benefits students who tend to include too much information in summaries to learn to focus on the most important information to include. For expository texts, a graphic organizer that helps students identify the topic, main ideas, and supporting details (Appendix D) can be used prior to writing summary sentences to put into a summary paragraph. This helps them to utilize the text structure of expository texts to identify what to include in a summary.

As Perfetti, Landi, and Oakhill (2005) noted, a huge factor in a reader's ability to make a coherent representation of a text is their ability to make inferences. One strategy that has worked successfully for me in the past is "It says, I know, And so" (adapted from Beers, 2003) (Appendix E). This graphic organizer is set up like a formula so that students understand it is a combination of background knowledge and textual evidence that produce an inference. Students identify the specific background knowledge and textual evidence they use to make an inference. A fourth column can also be added for

students to evaluate the quality of their inference and to identify any changes they need to make to their own thinking (Marzano, 2010). This helps students to think about the quality of their inference and to use the information gained in reading to update their thinking, and improve their comprehension of the text.

Because background knowledge is important in being able to make inferences and in monitoring comprehension (Anderson, Reynolds, Shallert, & Goetz, 1977; Rumelhart & Ortony, 1977; Spiro, 1980), another good strategy to introduce is the use of a Thinking Bridge. One that I have found to be useful is "I Used to Think…Now I Know" (adapted from Richhart, Church, Morrison, 2011) (Appendix F). In this strategy, students begin by stating their preconceptions. As they read, they look for any textual evidence that supports or refutes their preconceptions. After reading they record their new understandings. Another way to help students utilize their background knowledge is anticipation guides (Tierney, Readance, & Dishner, 1995). To use this anticipation guide (Appendix G) the teacher should first identify the key understandings from the text, choosing ones that are often misconceptions or misunderstood. Students read the statements, decide if each statement is true, and then explain their thinking and reasoning before reading. Students then read the passage and explain their thinking and reasoning after reading. This is also an example of a strategy that could be used in discipline-specific reading for another content area.

Once these pieces have been taught, a logical next step is to engage students in Palincsar and Brown's (1984) reciprocal teaching. This should begin with think aloud modeling of each of the four components of reciprocal teaching (Appendix H): summarizing, questioning, clarifying, and predicting. Summarizing should already have

been covered previously when teaching SWBS and SCU close reading. Questioning,

clarifying, and predicting can be introduced through teacher think-alouds. Students can

then practice these four components and receive feedback on their progress. Once

students understand and can independently complete each of the four tasks, reciprocal

teaching provides opportunities for powerful student-directed discussions and learning

opportunities. Reciprocal teaching creates an environment where students have a choice

in which parts of the text they discuss. It creates a purpose for reading and a need to

utilize resources and the text to problem-solve. It puts the responsibility of discovery and

inquiry on the students, which increases engagement and deeper learning. Reciprocal

teaching provides an opportunity for students to engage in problem-solving and discovery

efforts so they can learn "the working heuristic of discovery, and the more one has

practice, the more likely is one to generalize what one has learned into a style of problem

solving or inquiry that serves for any kind of task one may encounter—or almost any

kind of task" (Bruner, 1961, pp. 7-8).

CHAPTER IV: DISCUSSION AND CONCLUSION

Summary

Literacy skills are important for success in most aspects of life, from academic success, health maintenance, full-time employment, income, social interactions, and civic responsibility (OECD, 2015; Shanahan & Shanahan, 2008). The ability to read, write, and think critically is becoming a basic requirement for most jobs across employment sectors (OECD, 2015; Bernoff, 2016). However, the data is clear that adolescents in the United States do not have adequate literacy skills. With 70% of our middle and high school students needing remedial reading instruction (Biancarosa & Snow, 2006) and only 37% of our high school seniors scoring at or above the proficient level (NAEP, 2015), it is clear that reading skills at the middle level need to be improved. If students are to be prepared for the future, reading instruction cannot stop after elementary grade levels. Educators need to be deliberate about literacy instruction for adolescents.

Adolescents need an environment that promotes engagement, captures and builds on their interests, fosters a growth mindset that attributes success to effort, and allows them choice as they engage in inquiry and discovery (IRA–NCTE Joint Task Force on Assessment, 2010). Adolescents need teachers who will show an interest in them, set clear learning goals, model specific skills and thinking routines, and provide specific and timely feedback on how well students are progressing toward those goals (National Middle School Association, 2010). All of this should happen where students have access to a wide range of reading materials and can see an emphasis on the value and enjoyment of literacy.

Reading instruction in the middle level should begin by ensuring that students who fall into the 10% who do struggle with decoding have access to additional instructional support in this critically important but basic literacy skill (Carnegie Council on Advancing Adolescent Literacy, 2010). This requires that individual assessments actually identify the specific needs of each struggling reader (Buly & Valencia, 2002). Providing instruction on basic skills cannot be the end if students are to progress to the high-level literacy skills that are necessary for participation in everyday life (Heller & Greenleaf, 2007). Attention should then shift to intermediate literacy skills including building background knowledge, vocabulary, fluency, comprehension strategies, and comprehension monitoring. This should come in the form of direct and explicit, scaffolded instruction including teacher modeling, time for practice, and continuous feedback. As students learn to generalize these comprehension skills they are better-able to engage in discipline-specific literacy in other content areas (Kamil, 2008). Reading development is a process that must progress steadily from basic literacy to intermediate literacy to disciplinary literacy skills (Shanahan & Shanahan, 2008) or from playing the role of code breaker to meaning maker and then to text user, and finally to text critic (Brenner, Pearson, & Rief, 2007).

Within the direct and explicit instruction on comprehension strategies and comprehension monitoring, reader attention should be focused on the goal of moving seamlessly between monitoring the quality of understanding and fixing breakdowns when they occur (Dole, Duffy, Roehler, & Pearson, 1991). The research all seems to indicate that the strategies of summarizing, making inferences, and generating/answering questions have the most benefit in improving comprehension. Implied within these four

strategies are other skills including understanding text structure, identifying the purpose for reading, and determining importance. Also implied within these strategies is that the knowledge, understanding, and skills gained by reading can be demonstrated through a representation of the text and/or a discussion of the text. This leads to the assessment of comprehension, which should reflect this emphasis on making thinking visible and the importance of higher-level thinking that requires connections be made within the text, to other texts, and other areas of life.

Professional Application

If comprehension is to be improved and comprehension strategies should be taught, classroom practice must change. Teachers need the tools to make these changes happen. The application section of this paper provides specific tools that can be used in the classroom for teaching comprehension strategies. These tools are one way to make student thinking visible in order to model and provide feedback on their use of these strategies (Fisher, Frey, & Hattie, 2016).

By beginning with read-alouds and think-alouds, teachers can begin the process of modeling for all readers what proficient readers sound like and think about while reading. Teachers are able to model how to construct meaning, maintain that coherence of meaning, and provide students specific strategies to apply in their own reading. The next tool for classroom use provided in the application section is for building vocabulary. Vocabulary and comprehension are connected and improving vocabulary knowledge seems to improve comprehension (Kamil, 2003; Perfetti , Landi, & Oakhill, 2005). In addition to extensive reading experiences, there is a need for explicit vocabulary

instruction, given estimates that the probability of learning new words incidentally while reading is only 15% (Swanborn & de Glopper, 1999).

One of the first ways for students to make their thinking visible is by conducting a close read. Close reading helps students learn the thinking and reading skills involved in analytic reading (Frey & Fisher, 2013), a skill that is often required in other content areas. One skill that is necessary for conducting a close read is writing a summary. Specific frameworks for both narrative and expository texts are discussed in the application section of this thesis. Another important aspect of close reading is making inferences. An adaptation of Beers' (2003) inference formula is explained for use in teaching students to make inferences and to evaluate the quality of their inferences.

Another factor in comprehension is background knowledge. Background knowledge plays a role in how readers respond to challenges to their preconceptions and in their ability to comprehend a text. One strategy to help students identify their background knowledge is a Thinking Bridge (Richhart, Church, & Morrison, 2011). By engaging in this routine, students must identify the background knowledge they have and then monitor how their thinking changes while reading. A second strategy that is discussed is an anticipation guide (Tierney, Readance, & Dishner, 1995). Both of these strategies help students to differentiate between their background knowledge and textual evidence.

As these strategies are modeled and practiced and students are able to utilize these strategies independently, they can begin to engage in Palincsar and Brown's (1984) reciprocal teaching. Reciprocal teaching allows them to drive the discussion of the text, give and receive feedback from their peers, and regulate their own discussion. This is

when they really enter into the constructing phase of learning. This is also when students can delve more deeply into the text as they pose questions, problem-solve, and defend claims, all of which demonstrate higher-level thinking and allow all stakeholders in the learning process to have a voice (IRA–NCTE Joint Task Force on Assessment, 2010; Brenner, Pearson, & Rief, 2007).

Limitations of the Research

One aspect of effective comprehension instruction that yielded a surprisingly small amount of research was an understanding of how vocabulary knowledge and comprehension are related and why improving vocabulary knowledge seems to improve comprehension. Biemiller (2007) noted the importance of closing the vocabulary gap by grade two in avoiding the long-term negative effects of low vocabulary levels on overall reading proficiency. This connection between reading proficiency and vocabulary size has also been documented by others (e.g. Anderson & Freebody, 1983; Davis, 1968; Nagy, 1988; Stanovich, Cunningham, & Freeman, 1984). What remains unclear is how vocabulary knowledge and comprehension are connected and if there is a reciprocal, causal link.

A second area that yielded little research was in regard to improving comprehension for English Language Learners (ELLs) at the middle level, including the issues of "transnationalism" (traveling frequently between two home countries) and biliteracy/multi-literacy (literacy in more than one language). Wang, Perfetti, and Liu (2005) noted that initial literacy learning involves both phonological and orthographic processing skills and both must be developed in order to read in an alphabetic writing system and in a nonalphabetic writing system. However, this study focused mainly on

word recognition rather than reading comprehension. The number of students who are biliterate and who identify as transnational has also increased as immigration and international relocation have become more common and as language immersion programs become more common. However, more research is needed to understand second language acquisition, biliteracy, and transnationalism and how to best teach these students in our classrooms.

Implications for Future Research

One area for future study is how to effectively and efficiently deliver professional development in the area of comprehension instruction at the middle level. It is clear that this should begin at the pre-service level and continue on to in-service professional development. This will require changes in teacher preparation courses, professional development for existing teachers, and potentially require some restructuring by administration to ensure there is adequate staffing to identify and provide targeted interventions for struggling readers, particularly for ELLs. Throughout the professional development it will be important to emphasize that content area teachers bring a wealth of knowledge about the reading skills needed for the disciplines they teach so that when they are asked to teach reading in the content areas they do not feel responsible for teaching basic literacy or even intermediate literacy skills but the disciplinary-specific literacy skills they themselves are experts in. In other words, it requires a shift in perception to view disciplinary literacy skills as the means of demonstrating and communicating content knowledge (Moje, 2008).

Conclusion

The solution to the adolescent literacy crisis begins by building on the foundational skills developed in elementary grade levels and continues with solid literacy instruction in the English Language Arts classroom on the use of comprehension strategies and comprehension monitoring and extends to the application and generalization of these skills to reading in other content areas. It is clear from the research base we have that literacy instruction can and must continue for adolescents. Reading instruction and specifically comprehension strategy instruction must be taught in the English Language Arts classroom. Discipline-specific comprehension strategies, content-specific text structures, and academic vocabulary must also be taught in other content areas. Reading skills must be valued and emphasized for the important role they play throughout all facets of life and reading must be modeled by all stakeholders throughout the life-long learning process. A high level of literacy can and must be achieved by adolescents in order to "prepare tomorrow's youth for the challenges they will face twenty to thirty years from now" (Biancarosa & Snow, 2006, p. 9).

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APPENDIX A

Vocabulary Chart

Word	Definition	Example	How I Remember It

Word	Definition	Example	Non-Example	How I Remember It

APPENDIX B

Close Reading: Summarize, Comment, Underline

1. Summarize (What does it mean? What is important for my reading purpose?):
[Write your notes on one side]
    a. Identify the main ideas and supporting details
    b. Define unknown, challenging, or important words
    c. Paraphrase the page [Write this at the bottom of each page]

2. Comment (So what? What now? What do you wonder? What can you relate to?)
[Write your notes on the other side]
    a. Ask questions
    b. React, connect
    c. Analyze, evaluate, compare/contrast

3. Underline (What is the main idea? What are the key words?):
    a. Unknown, challenging, or important words
    b. Important ideas
    c. Answers to focus questions

7 A-ELA/ELA Close Reading Rubric

	5	**4**	**3**	**2**	**1**
Summary Margin	3 or more thoughtful comments per page that identify the main idea and supporting details	2-3 thoughtful comments per page that identify the main idea and supporting details	At least 2 comments per page that are somewhat thoughtful that identify the main idea and supporting details	1-2 comments per page that are somewhat thoughtful OR main idea and supporting details are incorrect	Comments lacking in depth OR missing some
Comment Margin	3 or more thoughtful comments per page that ask questions, connect, analyze, evaluate	2-3 thoughtful comments per page that ask questions, connect, analyze, evaluate	At least 2 comments per page that are somewhat thoughtful that ask questions, connect, analyze, evaluate	1-2 comments per page that are somewhat thoughtful	Comments lacking in depth OR missing some
Circled Words	3 or more challenging, unknown words per page are circled and defined 3 or more important words per page are underlined and explained	2-3 challenging, unknown words per page are circled and defined 2-3 important words per page are underlined and explained	At least 2 challenging, unknown words per page are circled and defined At least 2 important words per page are underlined and explained	1-2 challenging, unknown words per page are circled and defined 1-2 important words per page are underlined and explained	Challenging words per page are circled but not defined OR missing some Important words are underlined but not explained OR missing some
Summary Sentences	3 sentences per page that accurately identify the main idea and supporting details	2-3 sentences per page that accurately identify the main idea and supporting details	At least 2 sentences per page that somewhat identify the main idea and supporting details	1-2 sentences per page that somewhat identify the main idea and supporting details OR the summary is incorrect	Summary sentences are lacking in depth OR missing some

APPENDIX C

Summarizing Narrative Texts: Somebody Wanted But So

Somebody	Wanted	But	So
THEN			
FINALLY			

APPENDIX D

Summarizing Expository Texts: Main Idea and Supporting Details

Topic			
Main Idea 1		Main Idea 2	
Supporting Detail 1	Supporting Detail 2	Supporting Detail 1	Supporting Detail 2
Summary Sentence 1		Summary Sentence 2	

APPENDIX E

Inferences: It Says, I Know, And So

It says… (Textual evidence) +	I know… (Background knowledge)	And so… = (Inference)

It says… (Textual evidence) +	I know… (Background knowledge)	And so… = (Inference)	How good was my thinking? What changes do I need to make?

APPENDIX F

Thinking Bridge: I Used to Think...Now I Know

I Used to Think	Textual Evidence	Now I Know

APPENDIX G

ANTICIPATION GUIDE

Directions: Read each statement and answer true or false.

Before Reading	Statement	After Reading

Explain why each statement is true or false.

Before Reading	After Reading
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

APPENDIX H

Reciprocal Teaching: Reciprocal Teaching Response Sheet

For each section, record your responses for your role ahead of time. Then take notes on the other three as you discuss each section.

Chapters _____

Summarize	Question and Connect
● Summarize the section by identifying the key events. ● Identify the main idea and supporting details within that section. ● Identify the message the author wants to share with us.	● Ask questions about confusing words/phrases or sections. ● Ask questions about why characters act a certain way or make a particular choice. ● Make connections between events. ● Make connections between the characters and our lives.
Clarify	**Predict**
● Identify confusing parts within the section and provide an explanation and/or a strategy to clear things up. ● Identify confusing words or phrases and provide definitions.	● Before you read each section, predict what this section will be about. ● As you read, predict how events will turn out. ● After you have read the section, predict what the next section will be about.