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## The Impact Of Critical Reading Strategies On Reading Comprehension Among Middle School Students

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THE IMPACT OF CRITICAL READING STRATEGIES ON READING  
COMPREHENSION AMONG MIDDLE SCHOOL STUDENTS

by

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A capstone submitted in partial fulfillment of the requirements for the degree of Masters  
of Arts in Education

Hamline University

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To my parents who always taught me the importance of education, and who refused to let me give up! To my son, Brody, thank you for being my daily inspiration to be a better mom. Thank you for understanding all of the hours that I put into this. My hope is to provide a beautiful life that you deserve and this is a part of that plan. Love you always.

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## **CHAPTER ONE**

### **Introduction**

It is impossible for me to think of the learning process and the career of educating without focusing on the importance of literacy. As an educator of middle school students, it is my goal to make my students feel empowered in their learning process throughout every level of their education specifically throughout middle school social studies. Literacy skills come in many forms and can be taught in many ways. Based on my experiences, helping students learn appropriate literacy skills at each grade level can drastically impact their yearly success in all areas of a school including math and science. According to Grimm (2008), early reading comprehension has shown to be related to a greater understanding of mathematics and the application of math skills (Grimm, 2008, p. 410).

Learning critical reading strategies such as marking the text, vocabulary awareness, levels of inquiry, and the structure of writing opens a gateway for students to be successful in their learning throughout all academic subjects. If a student is not able to read and comprehend a text they may struggle to create and ask higher level questions related to the text. I believe that every educator is a reading teacher whether they teach English, science, or math. By using a variety of critical reading strategies in the classroom students are exposed to multiple forms of learning how to read, the creation of higher-level questions, understanding specific essential vocabulary words, exploring the purpose of each text put in front of them, and the opportunities to practice these skills.

## Research Rationale

Reading is a complex process and a great achievement when considering all of the components that need to be learned in order to successfully comprehend a text, and retain essential information. My overall goal with my research is to answer the following question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?* I chose this focus because early on in my career as a middle school educator I began to witness many students lacking the ability to read a text critically and inquire about its purpose. This seemed to quickly and easily snowball into students struggling in all of their core academic classes.

A lack of reading skills is a common reason that my students have shown negative behavior in the classroom. Many students show their frustration with foundational academic skills through consistent negative behaviors. Instead of identifying the root of the struggle, some educators see these types of students as disruptive and distracting to others. I want to empower educators to evaluate whether or not reading comprehension could be a cause of negative behavior by particular students. I want to provide educators with knowledge of how reading impacts learning as a whole. I want to create a place to access a variety of critical reading strategies and a simplistic tracker of critical reading strategies so teachers can easily see strategies they have used, and the frequency of use. I believe that learning from other teachers is a large part of growing and progressing in the field of education. I also want to create an open blog forum for teachers to share critical

reading strategies and activities they are using in their classroom as well as success' and failures they have experienced with reading strategies.

### **Personal Connection**

As a young child, my mother read to me frequently and she spent many of her evenings engulfed in various fiction novels. Reading as a hobby was modeled for me daily. Like my mother, I assumed that I would grow up and adopt the practice of daily bedtime reading as my own personal pastime. Although I enjoyed reading for fun as a young child, throughout middle school I quickly lost interest. My personal connection to reading and literacy goes back to the beginning of my educational experience. When I think of the connection between education and literacy, it looked very different when I was a child than it does now.

I recall as a young third grade student that I was expected by my teacher to read and understand a short story the first time, there was very little time for focusing on the process of comprehension and understanding of the text. I remember this causing me a lot of frustration and fear of getting in trouble for not understanding. Although I had learned to read at the same pace as my peers in kindergarten and first grade and I was able to read the words rather well, I often times found myself rereading the same exact line of text over and over again before I could genuinely understand what the words meant. Many questions came to mind such as: What are the words that I am reading trying to tell me? Does everyone have to read the words multiple times like I do to try to understand their meaning? What if my teacher calls on me to summarize the reading for the class or answer a specific question relating to the text?



My struggle with reading comprehension quickly caused me to become discouraged with school in general. I always assumed that if I was good at writing and was able to read words aloud that I would naturally be a great student with few academic struggles. I wondered why organizing my thoughts and writing them on paper came rather easy to me yet reading and understanding someone else's words seemed completely impossible at times. This discouragement allowed me to begin to resent school as I felt that I was not as capable as my peers. This struggle was especially apparent on my Minnesota Comprehensive Assessment exams throughout middle school, and I would lie to my friends about my scores due to the embarrassment I felt about not meeting the state standards. Looking back I wonder why I was not pulled for remedial reading interventions. It was not until my seventh-grade year of school that I had a teacher who implemented what seemed like thousands of different reading comprehension strategies that I could see my struggle start to diminish.

A few strategies my teacher would have me explore included breaking down the text into smaller sections to better digest the overall meaning, decoding specific words that were above grade level, and having me create hypothetical questions related to the text to explore the purpose. Although it may have taken me longer to get through the text, I began to understand it the first time while practicing these retention skills that had been taught to me. Ultimately I began to grow a love for not only English class but school once again. I want the students in my classroom who struggle with reading comprehension and retention who may appear to be unmotivated and lazy to love school again. I want students to feel confident participating in activities that require an analysis of a text and

producing work to exemplify understanding. I feel that I can achieve that by providing educators a variety of critical reading strategies to increase student retention and activities to promote critical thinking as a whole.

### **Critical Reading in the Classroom**

Educators today are expected to include a wide variety of reading strategies for students. According to Hernandez (2011), there is a link between proficiency of reading and graduation rates. Students who are not proficient readers by third grade are four times more likely to leave high school before graduation than students who read proficiently by third grade (Hernandez, 2011, p. 3). Early identification and intervention of nonproficient readers are essential; however, looking at how reading comprehension is taught could also provide valuable insight into proficiency in reading as a whole. The National Assessment for Education Progress tested a group of eleventh grade students and found that students had a hard time elaborating on a text and they had not read beyond a surface level. Thirty-six percent of the eleventh graders provided poor and insufficient answers (Selsky, 1990, p. 36).

When I began teaching I was familiar with basic critical reading strategies such as giving students a prompt to go along with the reading selection which allowed them to explain what they had read in their own words. This was the same consistent strategy that was modeled for me throughout elementary school. While trying to survive as a first-year educator who had four different classes to prep for each day, I did not expand my knowledge and search for other strategies. Although there is nothing wrong with the strategy I used, I realized I was using it far too frequently and it was not meeting the

needs of diverse learners. My high-level readers were doing great but they would finish quickly due to their abilities not being challenged. I was continuing to have a hard time reaching my middle and lower level readers by just simply asking them a question related to the text. I found that if they could not answer the question immediately, they would give up rather quickly.

The AVID program is what has fueled my passion for critical reading strategies as it has been my basis when exploring strategies to use with students. I was introduced to the AVID (Advancement via Individual Determination) program when I accepted my first teaching job and was asked to teach it. Despite not knowing what it entailed, like any first-year teacher I jumped at the opportunity to teach whatever was asked of me. The AVID program is a college readiness program designed to assist average students with various strategies to increase their academic success and to ensure they are career and college ready after high school. Research by Pugh and Tschannen- Moran (2016) supported the idea that the family-like atmosphere between educators and students that AVID creates can improve academic motivation and achievement (Pugh & Tschannen-Moran, 2016). The program has opened many doors for my students but also provides educators with phenomenal learning strategies specific to reading. The specific strategies I use in my social studies classroom include: chunking the text, predictions of the text, marking the text, vocabulary depiction strategies, higher level questioning, and collaborative discussion groups. An analysis of these strategies will be further explored in the literature review.

## **AVID and the Critical Reading Process**

According to McNamara (2007), “Many readers have an illusion of comprehension when they read the text because they settle for shallow levels of analysis as a criterion for an adequate level of comprehension” (p. 4). I believe teaching students to be critical readers and thinkers is essential to the twenty-first-century job market. It is quite difficult to imagine a career where there is zero reading involved and where little critical thinking takes place. Many times we ask students to read a text in order to create a connection and relate to the story or article in some way. Although asking a student to make connections to content helps with comprehension, that should not be the only basis for reading. Educators need to incorporate other reasons for reading outside of relating to the text. We need to allow students to be engulfed in an experience and an imaginative process when reading a text other than simply relating to the story. Along with reading, the inquiry is a large part of learning and understanding a passage or chapter. Students need to be taught how to ask higher level questions about a story or document they are analyzing. In my experience, if students are unable to comprehend and retain information, they are unable to create various levels of thoughts relating to the text.

I began teaching AVID as a first-year teacher. When offered my job teaching social studies, my principal also asked me if I would be willing to teach AVID. As a first-year educator landing my first job I immediately said yes without having any knowledge of what AVID entailed. AVID has now become one of my greatest joys as an educator. Many students join the AVID program with self-doubt and a vision that college or post-secondary training options are unreachable to them, I have also had the

joy of helping many of these students with their college applications and have shared in the celebration of acceptance letters. AVID creates a vision for students that college is possible no matter where one comes from. The AVID program is a college readiness program designed to assist students who display average level grades to exceed. As an AVID elective teacher, I am seen as a “mother hen” by my AVID students; my job is to remain an advocate and consistent support system for them. As a part of the AVID program, students receive extra support in their academic classes as well as specific curriculum focusing on writing strategies, the process of inquiry, collaboration skills, organization, and critical reading strategies. I believe that AVID is a significant reason that many students at my school are successful and continue their education after high school. AVID uses many resources and practices to expand student learning by teaching students levels of inquiry and using those levels to create questions and solve problems that arise in their academic classes through peer-led tutorial groups.

Although incorporating an extensive amount of critical reading strategies is essential to student learning, students also need to be taught to think critically. I frequently told my students “to think harder” or to “think outside the box” and after a lot of frustration, I eventually realized that they need more than a simple idiom to get them thinking critically. In the book, *A Place Called School*, Goodland (1984) reported data based on observations of more than one thousand schools across the United States. The data showed that more than seventy-five percent of the class time was spent on teacher-led instruction. Most of the instruction and interaction involved students simply recalling information. This study is a perfect example of why students are unable to

absorb the phrase, “think outside the box”. Educators do not regularly teach the skills to allow students to think at a high level.

Costa’s (2001) levels of thinking, as taught in the AVID curriculum, creates a framework of questioning which forces students to practice reflective thinking. Costa presents three levels of questioning. Level one questions are questions that can be quickly answered by a Google search or are found directly in the text or article. Level two questions are the “read between the lines” questions, where students have to not only use the information given to them in the text but also use prior knowledge and experiences to come to a conclusion. Level three questions are created by outside analysis of a topic. Many times level three questions begin with vocabulary words such as imagine, hypothesis, or predict. I learned very quickly in my teaching career that if I ask anything beyond a level one questions to my students or any question where the answer cannot be identified quickly it creates a state of panic and anxiety among them. Through the levels of questioning students not only learn to identify the different levels but they learn to create their own questions based on areas of personal struggle in their academic classes. Level one questions measure the very lowest level of reading comprehension, whereas asking students to answer or create level three questions based on a passage or chapter students need to fully comprehend and retain all of the complex pieces of the text such as main idea, character, setting, and plot. Costa’s (2001) levels of thinking and questioning should be taught in unison with critical reading strategies in order to create critical thinkers and successful students.

## Summary

Literacy and reading comprehension skills are a large basis for learning in every subject. Many students who struggle with reading comprehension show their frustration in negative ways and can be perceived as lazy and unmotivated to succeed. As someone who was taught reading and text analysis using one consistent strategy for many years, I too struggled with comprehension and retention of content. As I grew older and was taught to explore new strategies to comprehend a text, I realized that it was possible for me to understand what I was reading the first time by using various strategies to assist me in breaking down the text into what I felt were manageable sections to comprehend. The AVID program provides many resources to teach students how to critically analyze a text through critical reading strategies and levels of questioning. By using these strategies frequently, students can learn twenty-first-century skills to be successful in the current job market. I plan to create a place for educators to access many critical reading strategies that have already been created, and a simplistic form for teachers to track what has worked for students. I plan to include a blog forum for educators to openly share success and struggles regarding the implementation of various critical reading strategies in their classrooms.

The following chapter will include a review of literature relevant to critical reading strategies and the impacts on students as it relates to my research question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?* The review will include research on specific reading strategies, the frequency critical reading strategies are used

and the impact on students, findings on the importance of text analysis, and critical thinking skills regarding overall student success and the way educators can connect and learn from one another.



## CHAPTER TWO

### Literature Review

#### Overview

One could argue that literacy and the use of literacy to access information is a key component to being successful in a twenty-first-century job market (Murane, Sawhill, & Snow, 2012). Literacy is the basis of all curriculum taught in schools and in every subject area, students are expected to practice strategies related to literacy development, and educators are expected to provide students with the opportunities to develop literacy skills. Being a teacher in today's society, teachers are asked to wear many hats. A teacher is expected to not only support students academic needs, but to be a mentor, a parent, a counselor, a coach, and also be a part of curriculum teams, professional development teams, and professional learning communities. Unfortunately, today's educators are spread thin and are continually having to add to already full plates and teaching reading in every content class is just one more thing added. "Every teacher is a reading teacher" is a phrase used frequently within the academic walls of schools. I want to create resources for teachers to access in regards to critical reading strategies. I feel that by providing literature about the importance of implementing multiple critical reading strategies into curriculum along with creating a digital library of resources, a strategy tracker, and an open forum for educators to share success' and struggles, educators will be more likely to utilize these resources and in return will greatly benefit a variety of different learners. Given the importance of literacy in the 21st century, it is critical that all teachers have the expertise and skill needed to be a reading teacher. According to Kay

(1946), “If democracy, real democracy, is to grow, to become a vital force in our country and throughout our united world, every individual must be equipped to deal intelligently with the vast mass of printed and pictorial ideas presented to him” (p. 380). The purpose of this capstone is to provide busy educators with the information and support needed.

The literature outlined in this chapter will help me address the following question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?* In chapter one, I provided a rationale for my research question, my personal connection, and passion towards the topic, a perspective on critical reading in the classroom today, and the benefits the AVID program has had on fostering higher level thinking skills to increase reading comprehension and retention among students.

The following literature review will include four subsections, each section with a different focus. The first subsection address’ the historical link between the various factors that affect reading development and comprehension among students. It includes an analysis of literature focused around types of literacy, metacognition, student motivation as a variable related to different levels of reading comprehension. The second subsection analyzes current critical reading strategies used in twenty-first-century classrooms, technology integration, and current issues with current practices. The third subsection focuses on critical thinking skills and levels of questioning as a basis for understanding a text. Finally, the fourth subsection addresses the way reading comprehension and retention is measured, how frequently strategies are used, the

measurement of self-monitoring, and how to incorporate and track reading comprehension strategies used in the classroom.

### **Factors of Reading Comprehension**

Critical reading strategies are used in the classroom as tools to improve and sustain reading comprehension and knowledge, reading comprehension goes beyond the printed page (McNamara, 2007). Almost every academic subject uses some type of text-based material to relay information to students. Reading strategies have evolved over time as education and curriculum has changed and different practices have been used to make students better readers. Comprehension is defined using two categories, reading comprehension and listening comprehension, both crucial to understanding a text. The process of comprehension adapts over time as a reader changes, develops, and increases experiences with a variety of texts (Snow, 1998).

All content area teachers are expected to teach using various reading strategies. I have heard it said many times in the school that I work in by my administration and colleagues, that “every teacher is a reading teacher” even if they teach math or physical education. There is a responsibility to include text-based material in every classroom although it does not always happen. But many teachers see more value in delivering information and concepts in direct ways such as lecturing or using a powerpoint. This could be due to educators feeling overworked or due to a lack of training and knowledge on the integration of strategies. According to Ness (2007), “It seems clear that, when teachers feel instruction time is best spent delivering content, literacy integration takes a back seat” (p. 230). After doing hours of observations of reading strategies used in social

studies classrooms, Ness (2007) found that there was little time spent on the instruction of reading comprehension by teachers and the strategies that were being used had a narrow focus of simply asking students comprehension questions related to what they read (Ness, 2007). Although specific critical reading strategies can be impactful in the development of reading comprehension, the literacy development of the reader, as well as metacognition and motivation can also influence the outcome of comprehension in the reader. According to Gregory and Burkman (2012), “Reading is considered a basis for all learning, and students without functional literacy are at a significant disadvantage as learners” (p. 2).

### **Literacy Development**

The development of literacy skills early in life and the effects it has on reading later in life is still subject to debate, however, research does show a correlation between the understanding of the four types of literacy on development and reading comprehension. According to Gregory and Burkman (2012), “Complex interaction influences, changing and emerging employment situations, and interpersonal and social conditions all require us to read, write, speak and listen for a variety of purposes, and then take action based on what we have understood” (p. 9). The four types of literacy are critical to the development of language acquisition, reading, and comprehension skills.

**Four types of literacy** Functional literacy is the function of learning through verbal and written language acquisition: it is used to teach students how to read and write at a basic level at each appropriate grade level. Technology literacy is based on pursuing ideas and questioning through the act of research: it is used to create multidimensional

thinking using a variety of technology-based resources. Innovative literacy takes place through problem-solving strategies, and using resources in a creative way to survive outside of school in the real world and to create lifelong learners. Content-area literacy matures through the development of concepts and demonstrations used and is based on specific knowledge of each subject area and the demonstration of what is learned (Gregory & Burkman, 2012). These types of literacy are introduced at different age levels and abilities in the mainstream classroom to foster the growth of reading fluency in students.

### **Metacognition**

Metacognition relates to understanding and monitoring of cognitive process that take place in the brain. Cognitive process' is activated when reading and processing of information takes place. There are many definitions of metacognition but it is essentially the thought about the general thought process and having an awareness of one's own cognitive processes.

According to Costa (2001):

Metacognition is our ability to plan a strategy for producing what information is needed, to be conscious of our own steps and strategies during the act of problem solving and to reflect on and evaluate the productivity of our own thinking. (p. 221)

There is a multitude of cognitive processes involved when learning takes place (Salkind, 2008). Being aware of one's metacognition is important when it comes to learning and development across all areas but are especially important to the development of reading.

There are three skills related to the self- management of metacognition in regards to the complex process of reading. These skills include evaluation, planning, and regulation (Salkind, 2008). Evaluation relates to personal abilities and the effects on reading comprehension, planning relates to the reading strategy chosen to meet the desired outcome of the task, and regulation relates to monitoring and redirecting during the reading process in order to meet the desired outcome (Cross & Paris, 1988).

The research on metacognition and the relation to reading comprehension is not always decisive. Some research shows little to no correlation between levels of metacognition and reading comprehension skills as research suggests that metacognition is related to age and changes constantly. As quoted in Myers and Paris (1978) “In general beginning readers like young children in other cognitive tasks have an extremely limited understanding of the task dimensions and the need to apply strategies for reading” (p. 681). Children need to be well aware that there is a required meaning to be found within a text and this type of skill can account for individual differences in a child's metacognition and capacity for reading as well as levels of what is comprehended (Lecce, Zocchi, Pagnin, Palladino, & Taumoepeau, 2010). Research by Cross and Paris (1988) supported that there is a relationship between cognitive awareness, the use of reading strategies, and levels of reading comprehension. These findings are correlated with students who received training on metacognition and saw positive impacts on awareness and reading comprehension outcomes although more data must be collected (Cross & Paris, 1988). By embedding training on metacognition into current curriculum students

will be provided with resources and information to allow them to analyze the process of thinking.

### **Motivation and Habits**

I imagine that there is an understanding among educators that creating motivation in students to see the importance of reading for academic purposes is important. It is also crucial to find enjoyment in the act of reading which can dramatically impact whether or not students are motivated to participate in reading activities in class. When analyzing levels of motivation it is important to understand the difference between extrinsic and intrinsic motivation and their relationship on levels of engagement in learning (Intrinsic and extrinsic motivation, 2009). Intrinsic motivation is the motivation to complete a task for enjoyment or satisfaction without obtaining a reward in the end. Extrinsic motivation occurs when a task is done to achieve some type of external reward (Schaffner, Schiefele, & Ulferts, 2013).

Reading is characterized as a skill that increases in effectiveness the more it is used, meaning that there is a correlation between the amount of time spent participating in reading and related activities and the level of literacy skill achieved. Young children whose parents read often to them quickly gain the ability to memorize and recite certain parts of specific books (Snow, Burns, & Griffin, 1998, p. 58). Various research studies have been done to look at variables that impact reading comprehension and academic success. A particular study was done by McGeown, Funcan, Griffiths, and Stothard (2015), and focused on the connections and relationships between reading skills, differences in gender, motivational aspects of adolescents, and habits and the impacts on

learning. The study found that those who had better reading skills were more motivated to read and therefore had better scores when tested for reading comprehension. The study suggests that focusing on boosting the motivation to read among adolescents could directly impact the level of comprehension displayed and result in a deeper understanding of the text. Motivation to achieve anything in life can have a drastic impact on the ability to be successful and reading is not an exception.

The development or lack of reading skills early in life can be impactful on levels of reading comprehension as a child grows older. In order to understand that reading comprehension is crucial to academic success, it is important to explore the learning components that must come before a text can be comprehended. The development of literacy is crucial as it is connected to all forms of interaction in everyday life. Cognitive development and processing are likely to be correlated in some ways to the development of reading. Levels of motivation can impact the willingness and effort by students and can, therefore, influence the outcomes of reading comprehension. To understand whether or not reading comprehension strategies are effective one must first analyze the framework of what comprehension entails.

### **Current Critical Reading Practices**

Reading comprehension is contingent on many things. Literacy development, metacognition levels, intrinsic and extrinsic motivation, teaching strategies, student support and interventions, and specific comprehension strategies are a few main factors related to successfully being able to read and understand a text. It is important to understand research related to critical reading strategies, and practices that are currently



being used in classrooms as well as research studies that have been conducted to validate the impact of the strategies. Although educators use different strategies in many ways, the following sections explore a few research-based strategies that are most frequently utilized to promote reading skills and reading comprehension. These strategies include vocabulary, paraphrasing, and summarization strategies.

### **Vocabulary**

The benefit of using vocabulary strategies when teaching reading skills is widely known by researchers. Marzano (2009) identified six specific steps to use when teaching vocabulary instruction. These steps include:

1. Providing a description or explanation of the term(s).
2. Having students restate the description using their own terminology.
3. Having students create a nonlinguistic representation of the term(s).
4. Having students participate in activities to expand their knowledge of the term(s).
5. Having students discuss the term(s) with one another in various ways.
6. Having students participate in competitive games to use the term(s).

Marzano (2009) suggested beginning with a teacher explanation, then allowing students to practice the vocabulary and continuing to revisit the vocabulary over time.

Understanding the meaning of specific words is essential when analyzing any type of text-based document, however, not all vocabulary strategies are equally effective at increasing levels of reading comprehension. “To be effective, then, vocabulary instruction must provide both adequate definitions and illustrations of how words are

used in natural sounding contexts” (Nagy, 1988, p. 17). Simply defining a word is not enough for a student to process and connect the word to what is being read and can create a disconnect. Properties of effective vocabulary instruction include the process of integrating new information to previous knowledge, the brainstorming process of researching new word meanings and making connections between similar words, and the identification of synonyms and how specific words relate to one another (Nagy, 1988). Students need to be exposed intentionally and frequently to a variety of vocabulary strategies. According to Gregory and Burkman (2012), not all vocabulary should be taught using the same strategies. Some vocabulary words are concrete and easy to learn whereas other words have multiple meanings. Some words are used frequently in a variety of contexts and need to be taught directly due to their complexity. It is important to identify whether or not words are simplistic and concrete or are more abstract before deciding a strategy to teach them (p. 4).

Beck, McKeown, and Kucan (2013) found the following:

In terms of learning new words in the course of reading, research shows that it does occur but in small increments. That is, by no means will all the unfamiliar words encountered in reading, be learned, and those that are learned will require multiple encounters with them before learning is accomplished. (p. 5)

The process of learning words is lengthy and can change over time as one acquires new learning and experiences, therefore, a robust approach to vocabulary has shown to be effective (Beck, McKeown & Kucan 2013).

## **Paraphrasing**

Students are frequently asked to define a word or explain a concept in their own words although many students do not realize the meaning of “in your own words” and will simply change one or two words of what they originally read and refer to it as their own definition or description. Research by Hagaman and Casey (2012) suggested, by using strategies such as the think-read-ask-paraphrase strategy students have the potential to gain a greater level of comprehension as students have to interact with the text in multiple ways. Students must think about the topic and identify keywords before they begin reading. Students then read the text and ask specific questions about the meaning of the text. Finally, they use the details they have identified to paraphrase the main idea of the text in their own words (Hagaman & Casey, 2012). According to Kletzein (2009), paraphrasing can increase comprehension by merging previous knowledge with new knowledge as well as the engagement with the text by rewriting what was read to demonstrate understanding (p. 73). When the strategy of paraphrasing is modeled for students, when it is used frequently, and when students receive adequate support with the strategy so that they can learn to use it independently it is a very effective strategy to enhance reading comprehension.

## **Summarization**

As students grow in learning, they will experience text in multiple forms. Students may also encounter multiple forms used at the same time, students may be asked to connect two text sets together or distinguish between the two. This strategy would most likely require some form of writing. Reading and writing are closely connected as

combined they make up the component of literacy. Ucelli (2018) suggested that summaries should be made up of specific components: a summary should be a collection of the text's main ideas. The summary should not include ideas from outside of the text and should be free of any personal opinions about the text. A summary should always be written in the words of the writer and not copied from the text itself. In a study conducted by Vieiro, Pilar, García-Madruga (1997), it was identified that students who produced a written summary after reading a text were more successful when it came to the literal recall of information that was read. There is a multitude of research that shows writing summaries increases reading comprehension, however, not all researchers are convinced. Spiegel and Delaney (2016) researched the effects of summaries on memorization. The research showed that summaries can be ineffective. They suggested that one possible important factor could have been that many of the students used in the study had a hard time knowing what to write and therefore did not do well in creating the summary. Many of their studies were inconclusive as to whether or not written summaries increased the memorization of a text. They suggested that if students knew how to properly write summaries and distinguish between critical and noncritical information, a summary could have helped them comprehend and memorize critical details (pp. 188-189). This collection of studies suggests the importance of teaching students how to properly summarize and the impact that it has on the ability to comprehend various text materials.

### **Issues with Current Practices**

The most significant drawback with current critical reading strategies in the classroom is not necessarily due to the strategies themselves but that educators are not

utilizing them or are not utilizing them effectively and students are not engaged in the strategies used. Kim et al. (2017) argued that multicomponent reading interventions often include isolated practice on basic reading skills but rarely embed basic skills to work in more cognitively challenging and engaging literacy activities (Kim et al., 2017). There is enough research that suggests that the frequency in which critical reading practices are used does impact levels of comprehension. A study that was conducted by Marloes et al. (2017) found that the frequent use of reading skills taught and practiced by fourth-grade students impacted the level of reading comprehension achieved once the students were tested in fifth grade (p. 205). Children who were identified as having a reading comprehension impairment were placed into intervention groups to see if specific reading skill interventions would impact the level of comprehension met by the students. The study found that the children who received interventions in specific areas such as, text-comprehension training and oral language showed large improvements in reading comprehension immediately after the interventions took place (Hulme & Snowling, 2011). Identifying reading struggles early on can also play a role in whether or not students will have difficulties with reading comprehension. Students who struggle with reading comprehension are not always identified before levels of comprehension are being tested. It is important to identify early on the struggles that students face with certain skills that may suggest whether or not they will struggle with reading comprehension at a later time. Research suggests that if students struggle with specific skills such as oral language difficulties and issues with working memory processes at a

young age they may be at greater risk of having difficulties with reading comprehension as they grow older (Clarke, Truelove, Hulme, & Snowling, 2013).

Identifying reading comprehension strategies that work for students is important. Focusing on pieces of reading such as vocabulary, paraphrasing, and summarization techniques have proven to be effective for some students. Not every strategy will work for every student so it is important for educators to be flexible and try many things. By creating a place for educators where multiple strategies are easily accessible, they will be able to incorporate them into the classroom as well as track which strategies are most effective for students. The next section will explore concepts related to critical thinking and how problem-solving and levels of questioning could possibly play a role in the development of reading comprehension skills.

### **Thinking and Questioning Related to Comprehension**

Thus far the literature review has explored the multiple facets to the way text is comprehended in humans and certain reading skills that need to be developed before comprehension can be achieved, as well as specific comprehension strategies that have been proven to be beneficial to students. This section explores how levels of critical thinking and questioning can correspond to the retention of information as well as the role a student's ability to problem solve may play in the complex process of reading as well as how the Schema theory relates to the skill of reading.

### **Schema Theory**

The schema theory explains the way knowledge is developed inside of humans, it focuses relatively on inductive reasoning and personal experiences as a basis for

knowledge (Li, 2014). The schema theory is important to understand when exploring the topic of reading as it applies to the way information is stored in long-term memory as well as how everything that is comprehended is connected to one's knowledge to the world (Li, 2014). There are various types of schema included in the theory however, I am focused on the concept of the content schema as it refers to background knowledge in relation to understanding text materials and linguistic schema as it relates to the knowledge of grammatical structure and vocabulary (An, 2013). The schema theory looks at learning as the retention of information learned in the form of a cognitive structure showing how concepts are learned, related and connected to other concepts (DeChenne 1993). Although the schema theory is relevant to reading comprehension, the topic itself can be broad. Anderson and Pearson (1984) presented research that suggests that humans tap into a selected schema while making inferences while reading, this can affect levels of comprehensions depending on which schema is selected and how it is used. They suggest that it is used in many ways. The schema selected is used by placing specific characters displayed in the reading into appropriate schema slots about that character's role, it is also used to create ideas when a lack of knowledge is present. When a piece of the story is missing, one can fill in the gaps based on what information they have gathered, what inferences have been made, and life experiences that have taken place (pp. 268-270). For example, when one reads a section of text that reads, "He jumped into the deep end," the term "pool" which is associated with the previous statement, would be activated in the mind to fill the slot where the information was

missing. This type of schematic process takes place frequently during the reading process (Nassaji, 2007).

### **Critical Thinking**

Most educators would agree that the skill of thinking critically is an important tool used in school as well as everyday life. Critical thinking can be described as many things such as self-directed, a reflective practice, the ability to create connections and conclusions, or self-regulatory interpretation (Ghanizadeh, 2017). People who think critically are typically skillful in areas such as, analysis, evaluation, interpretation, inference, explanation, and self-regulation (Facione, 1998). After analyzing the complex terminology that critical thinking is made up of it is clear that critical thinking is a complex process and something that should be taught to students. Costa (2001) explained the importance of teaching children to think critically in his research. Costa argued that there are not enough teachers who see the value in teaching high order thinking skills and that teaching critical thinking requires various stages. A few of the stages suggested focus on the idea that students first need to feel that they are in an environment where they feel safe, students need the chance to reflect on their thinking which fosters an environment for them to explore their thought process, students also need to be encouraged to participate in the process of collaborative thinking, and educators need to focus on teaching students to ask higher level questions versus the search for answers (Costa, 2001, pp. 23-25).

The critical thinking process is connected closely to reading as one must be able to connect prior knowledge and new information that is presented in the text as well as



connecting the content that the text provides and the strategy being used to extract the content from the page (Costa, 2001). Costa suggested that there is a before, during, and after model to reading critically, that should be used to enhance comprehension levels. Students should be taught to think critically about the text before it is read by first skimming the text and creating a hypothesis about the meaning or making predictions. During the reading, students should be taught to use decoding skills to identify specific vocabulary words, begin to identify critical versus noncritical information and start to make connections to prior knowledge. After the reading occurs students should be able to accept or reject the previous hypothesis or prediction and explore the authors perspective for writing the text (pp. 167-168). When critical thinking skills are taught effectively students should be able to make their own choices to enhance reading comprehension. Some of these choices include choosing which reading strategy best fits the type of text material that is being used, as well as various ways for them to evaluate their own learning (p. 169).

### **Levels of Questioning**

Thinking critically allows students to explore questions rather than answers. Critical thought does not take place when the question developed can be answered with a simple google search. Educators use questioning as a teaching tool frequently to assess what has been learned but don't always ask students to participate in the questioning. Costa and Kalllick (2015) suggested that there are three levels of questioning related to critical thinking. The first level of questioning involves recognition, defining, and listing information. The second level is where processing takes place using skills like

comparing, analyzing, and organizing. Level three requires an output of data. This level requires students to synthesize information from many places such as the application and evaluation of information. When students are using level three questions they are required to use the information to analyze how it applies to the real world. Questioning can be used to allow students to go beyond the surface level of learning, and dig deeper into a specific concept or text (Costa & Kallick, 2015). A study done by Ryan (1973) saw a strong correlation between low levels of questioning taking place in the classroom among teachers and students and lower levels of achievement. The same was true in the correlation between high-level questioning. When educators asked students higher level questions, students have the ability to reach higher levels of achievement. This study presents evidence of the impact higher levels of questioning can have on student achievement (pp. 63-66).

### **Problem Solving**

Although the levels of questioning and critical thinking are essential to learning it is important for students to learn how to move forward when they get stuck, specifically in reading. Research suggests that problem-solving is dependent on one's own cognitive process and the ability to transfer information and allow for insight (Gosen, Berenst, & De Glopper, 2015). Problem-solving in a school setting is oftentimes linked to social-emotional health and subjects such as science and mathematics but problem-solving is also essential to everyday life. Students may encounter problems in many scenarios. For example, students may come across a fictional problem a character is having in a novel and need to analyze what went on in order to keep reading or

understand the story. Students may also encounter personal problems during the process of reading. For example, a student gets stuck on the meaning of the word, or is having trouble identifying the main idea of a passage and is unsure how to continue. When students know how to effectively solve problems they are able to make decisions about the next step in their learning before they become frustrated. Once students become frustrated and unfocused learning is no longer taking place, problem-solving skills allow students to be proactive when encountering potential struggles in skills related to learning (Adams & Wittmer, 2001).

This section reviewed the impact that cognitive processing and critical thinking connect prior knowledge to new information and the impact that can have on successful levels of reading comprehension. The schema theory connects to the way knowledge is represented in the mind and the role is played when interpretation is need while reading a text (Nassaji, 2007). Costa's research displays the importance of teaching critical thinking and using levels of questioning as a critical reading strategy to assess what students are able to comprehend on the surface, the ability to comprehend in comparison to other things, and comprehension taking place outside of the text all together in the real world (Costa, 2001).

### **Measurement of Reading Comprehension**

After defining facets that make up levels of comprehension as well as strategies to help support and increase comprehension, it is important to understand how comprehension levels are measured on a large scale. According to statistics presented by Minnesota Report Card (2018), results of the 2018 Minnesota Comprehensive

Assessment (MCA) based on those surveyed showed that 19.9% of students exceeded reading comprehension standards, 40.5% of students met the standards, 18.3% of students partially met the standards and 21.3% of participants did not meet reading comprehension standards. Oftentimes reading comprehension assessments are used to make various decisions about things within a school district, and can hold an enormous amount of weight.

Barbe (1958) suggested two main reasons behind the purpose of assessing levels of reading comprehension. The first reason is to determine whether a student understands what is read and the second reason is to know what needs to be taught in order to increase levels of comprehension in students (p. 343). Reading comprehension exams should evaluate grade level comprehension and should eliminate other reading factors. Other things that factor into reading comprehension include vocabulary range, experiences, prior knowledge, and the ability to identify the author's purpose (Barbe, 1958). It is important to analyze what takes place during the act of reading before determining how comprehension should be measured. Van den Broek and Espin (2012) provided a description between the product and the process of text comprehension. The product is described as what is left for the reader to ponder and think about after the reading takes place. Advanced readers will develop thoughts with a lot of detail related to the text after it is read whereas struggling readers will lack that ability. The process involves what takes place while reading occurs (p. 316). Van den Broek and Espin (2012) argued that some of these processes take place automatically and some of them need to be taught. It is likely that students will need to combine both automatic and learned processes at

different times during reading for comprehension to take place (p. 318). Therefore, if the various cognitive process' happen at different speeds students may appear to struggle with reading comprehension when they simply need more time.

Many researchers agree that the assessment process is in need of improvement but the way to do so is unclear. Cutting and Scarborough (2006) did a study that evaluated many reading comprehension assessments. Their assessment measured many different cognitive skills. After assessing 97 children their findings presented that decoding and word recognition did have an impact on levels of reading comprehension. They concluded that although many of the reading comprehension exams studied were similar, they did not all allow for the consistency of using the same cognitive process and this can impact the outcome of the results. The study showed evidence of reading speed and the direct correlation to reading comprehension predictions (pp. 282- 294). This provides evidence that many of the assessments currently used to assess levels of reading comprehension may result in a large degree of variation in scores dependent on certain variables such as the amount of time the student has to complete the assessment. Using a variation of reading assessments can be detrimental to student learning. Reading comprehension assessments are often used for things that make a large impact on students such as placement in special education classes or to analyze appropriate interventions for students (Cutting & Scarborough, 2006).

### **Problems with Current Assessments**

One issue with current standardized assessments that aim to test reading comprehension and evaluate the level in which a student understands a text instead

focuses one's ability to memorize information that is read (Barbe, 1958). Comprehension assessments oftentimes test more than simply what is understood by the reader. Research done by Sabatini, Albro, and O'Reilly (2012) concluded that various comprehension exams can be rather subjective and by using only one assessment with students the results may be inaccurate. When five different reading comprehension exams were analyzed it was noted that many of the variations in levels of student performance were accounted for by word decoding (Sabatini, Albro, & O'Reilly, 2012). Varying results on comprehension exams can be allocated to various ways of formatting. Sabarini, Albro, and O'Reilly (2012) analyzed why assessments of reading comprehension used questions regarding word interpretation and analysis so frequently. It was determined that when a text is shorter in length decoding is more essential as failing to understand a single word can create confusion about the entire passage. Another possibility is that there are enough ideas presented in short passages which can make testing comprehension difficult (Sabatini, Albro, & O'Reilly, 2012, para. 2-3). Another issue with exams that measure reading comprehension is that they are created by many people. This results in various authors having multiple views on what reading comprehension should entail. Other variables include the time that a student is given to take a test and whether or not the student has the reading passage available to go back to while answering comprehension questions or not (Cutting, & Scarborough, 2006, p. 281).

Dewitz and Dewitz (2003) determined that many things impact the performance of comprehension when measured. Some of the factors include the specific level of the passage, the type of text, whether or not the text is read silently or orally, as well as

whether or not the student is able to ask clarifying questions about what they previously read. (p. 423). Educators should focus on evaluating students reading abilities, and determining how they think and process information, that information can be used to identify specific critical reading strategies that are based on a student's individual needs (Dewitz & Dewitz, 2003).

### **Summary**

Reading is a complex process made up of many cognitive processes. The goal of this research is to explore answers to the following question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?* This section focused on literature relating to four main topics. The first topics included specific factors relating to reading comprehension outcomes including literacy development, metacognition levels, and the impact of motivation on reading comprehension. The second topic explored common critical reading strategies used currently in twenty-first-century classrooms. These strategies include vocabulary awareness, proper use of paraphrasing, summarizing strategies, as well as arguably shortcomings of current strategies. The third topic included an overview of the schema theory, the impact that critical thinking skills have on academic ability, teaching students to participate in high levels of questioning, and the impact problem-solving skills can have on overcoming reading struggles. The fourth topic analyzed how reading comprehension is currently measured and the concerning discrepancies among various reading comprehension assessments.

These four topics provide valid research as to why developing a place for teachers to access a variety of critical reading strategies and the ability to track students progress and seek advice from other educators is especially important in allowing students to improve and advance literacy skills. Chapter three outlines the description and design of my capstone project. It outlines the intended audience for my project and the rationale behind the research in order to create a greater understanding of how important critical reading strategies are on reading comprehension.



## CHAPTER THREE

### Methodology

#### Introduction

Working in a large school district can be difficult when it comes to communication. Teaching at a secondary level makes it difficult as educators rarely have time to get together and collaborate on various strategies. I intend to create a place for educators to obtain resources and share thoughts and ideas about what works for their students in regards to critical reading strategies. In chapter three I will provide a clear description of the framework for the project I will be created based on the following research question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?*

The purpose of this project is to create a way for educators to collaborate and share ideas about students who struggle and excel at reading by using a virtual setting rather than needing to meet face to face. Many teachers currently use critical reading strategies in the classroom, but they may not use a variety of strategies or track when certain strategies are being used and whether or not they are having a positive impact on students levels of reading comprehension. In my opinion, it takes a village of educators to foster learning, to create a school culture of collaboration and to create successful students who love school. Many times I find myself wondering what other teachers are doing to help struggling readers but do not always feel that I have the necessary space to reach out to educators who are already overworked, I feel that adding an open forum for teachers to share what works may spark ideas among other educators. In chapter two I

reviewed essential research and literature that correlated with the development of literacy, variables to reading success, twenty-first-century critical reading practices, and current practices for measuring reading comprehension. Chapter three will provide a detailed description of the intended project, the setting in which the project will take place, the audience it is intended for, and the timeline in which it is to be created and utilized.

### **Description and Rationale**

The project I created includes a website that houses a variety of critical reading strategies for educators. I chose to use google sites to create a place for educators to access a variety of critical reading strategies to use with students in their classrooms. I included a google form tracker for teachers to use to keep track of which strategies they have tried and to either track individual students and their success or each period of classes in order to assess what works and what does not work for different students. I included tips for differentiating various strategies to meet the needs of students who may be in the same class but at different ability levels. The website includes a connections page on my website for educators to connect with one another via social media to collaborate or share success' and struggles of using critical reading strategies with students.

Various research has supported the importance of reading comprehension among students. According to Clarke, Truelove, Hulme, and Snowling (2013), "Text can inform and develop knowledge, provide us with new vocabulary and provoke new ways of thinking" (p. 1). Learning to comprehend and understand a variety of text materials can open many doors for students. Reading is the framework for many academic classes and

as students grow older reading materials are used as support when learning complicated concepts (Ness, 2007). The lack of reading skills could prevent students from being successful in many academic classes. According to Snow, Burns, and Griffin (1998), reading comprehension can be enhanced when various skills are taught properly. Reading comprehension difficulties can be prevented by the frequent use of skills. These skills include vocabulary development, the structure of language, and specific comprehension strategies such as summarizing and predicting. It is crucial for students to practice the skill of reading in order to enhance comprehension levels (p. 6).

My reasoning behind choosing the topic of reading comprehension is that I have witnessed many overworked teachers allow literacy to take a back seat in their classrooms due to reasons such as content coverage or standardized test scores. If educators do not take enough time to focus on reading comprehension skills in students this produces lower levels of learning, frustration among students, and lower test scores. I want to bring awareness to the importance of reading comprehension skills and the critical reading process as well as provide tools for educators who wear multiple hats throughout their school days that are accessible and easy to implement.

I chose a website format for my project as I feel that it was the best way to make resources easily accessible for twenty-first-century educators. The use of technology has become a part of everyday life as an educator. Teaching has become a public entity. Teachers once referred to books and journals when looking for resources to expand their knowledge and teaching in the classroom and now many of the resources teachers obtain come directly from the web (Lieberman & Pointer, 2010). I feel that is important to use

twenty-first-century technology to house critical reading strategies as educators are expected to develop and change their teaching practices as society adapts. I started by identifying a quality website framework that has the ability to house many different resources but also maintains a simple design. I chose to create a google site. I wanted the website to be user-friendly and easily navigable for educators who are at varying levels when it comes to being comfortable with technology resources. Web-based learning created a more interactive and global environment (Khan, 1997). According to Gehrke and Turban, (1999), successful websites refrain from including distracting images. Other successful websites include consistent navigation, and thumbnails used to easily organize materials, and the site is updated frequently to include fresh information for users (Gehrke & Turban, 1999). I identified what I felt were the most important critical reading strategies to include in my collection of resources. I created a user-friendly tracker that can be adapted to meet the individual needs of teachers. Lastly, I focused on creating a connection section of the website for educators to openly collaborate on ideas and strategies via social media and online resources.

The website was designed simply and with the focus of making it user-friendly for all technical abilities. Tornoe (2015) explained that users have an overall better experience when viewing a website that is easily navigable, uses short paragraphs, and is free of clutter. By doing this the reader can focus more clearly on the specific content that the website provides (Tornoe, 2015). I created a website that is free of distracting information and clutter to better showcase the importance of the resources provided for educators.

The outline of my website includes a home page and literature related to the importance of reading skills and reading comprehension levels on student success. The web page includes tabs that house a variety of strategies split into categories so that educators are able to quickly identify what they may need, some of these categories include vocabulary, summarization, and paraphrasing to assess comprehension levels of text materials. There are tabs that include differentiation tips for educators that have diverse learners in their classrooms. There is also a link that includes a google form tracker to identify what has worked and what hasn't for specific students or classes. Educators will have the ability to copy and adapt the google form tracker to fit their needs and the needs of their student population. Lastly, there will be a space for teachers to explore pages of other educators that are online. This will allow for a sense of community among educators and facilitate a conversation about different opportunities for students and strategies for instruction.

### **Project Setting**

This project will most likely first be utilized in a rural area middle and high school where I currently teach. This school includes students from sixth grade to twelfth grade and is located in a small town of approximately six thousand people. Many of the students in the school are very close as they have grown up together since they were in elementary school. The district is growing rapidly as it is one of the largest in the state of Minnesota that includes three large high schools, five middle schools, and ten elementary schools that serve over thirteen thousand students across three different towns. Eighty-eight percent of students in the district identify as having White ethnicity. Three

percent of students identify as Latino. Two percent of students identify as being African American. Two percent of students identify as Asian. Four percent of our student body identifies as two or more racial groups. Class sizes typically include 25- 35 students. Students who are considered to be a part of special education programming make up 15.3% of the district population. English Language Learners make up 2.3% of the district's population and 17.6% of students receive either free or reduced lunch. Special education students are mainstreamed in the majority of classes offered aside from math and English. In September of 2016, the students in this district overall ranked third in the state of Minnesota in reading proficiency scores based on Minnesota Comprehensive Assessment exams. Although reading proficiency scores have increased in my current district, I plan to maintain and possibly increase levels by providing a variety of resources for practicing teachers. There is a large academic achievement gap in Minnesota related to the skill of reading and retention and the website of resources that I am creating could assist in diminishing the gap. I will be presenting my completed website to my colleagues in hopes that I will continue to adapt and add to it so that I can share it with other schools and educators on a more global level. The hope is that the setting for the project will expand among secondary classrooms of all subjects in all areas of the United States.

### **Intended Audience**

The intended audience for this project is educators that teach middle school aged students who are passionate about enhancing literacy skills and reading comprehension among students in order to increase student achievement. Educators will be able to implement these activities either as an entire lesson focused on literacy or in conjunction

with a lesson that entails multiple parts and using the strategy as support for understanding. Depending on the student population and demographics most of the strategies included in the website should be able to be utilized within one or two class periods. Some of the strategies included in the website may need to be scaffolded or differentiated for students at different levels, tips for how to do this will also be included.

### **Timeline**

The research and development of the review of literature based on my research questions began in the Fall of 2018. The creation and completion of this capstone project took place in the Spring of 2019. The website that houses thirteen teacher ready critical reading strategies was created in a seven-week time span.

### **Evaluation**

By using the critical reading strategies that are housed on the website I will be able to incorporate them into my daily lessons. By assessing students reading comprehension before and after the strategies are used I can determine if the strategies used are effective or not. The google form tracker included in the website allows for students to give feedback to their teacher on the strategies used in class and whether or not they felt they were beneficial to meeting the learning target for the day. As the host of the site I will be able to view the amount of times resources have been copied to see how frequently the site is being utilized by users. It is my hope that educators use the connections page to reach out to other educators for advice or guidance on the process of using critical reading strategies to increase reading comprehension among students. As the website grows and is used on a global level I will include a place for users to submit a

review about the website. I will also include a contact page for users to contact me directly with feedback about the site.

### **Summary**

Chapter three has provided an outline of my capstone project, the project setting, the audience in which it is intended for, and a timeline for completion. It is my goal that the website I developed will continue to bring awareness to the importance of reading comprehension on student achievement. This project is intended to encourage educators to frequently use critical reading strategies in their classrooms by providing critical reading strategies that are easy to implement in a variety of settings. I hope by collecting strategies and housing them in one place, I will inspire educators to not only try many strategies and track student progress but to also collaborate with one another on different ways to combat struggles with reading comprehension among students. Chapter four will provide an overview and personal reflection of my capstone project. I will reflect on what I have learned during the creation of this project and ways I intend to use the website as a resource moving forward in my educational career.



## CHAPTER FOUR

### Project Conclusion

#### Introduction

When I began teaching I latched on to the idea that all students should learn to read and comprehend a text through various strategies, not to perform on a standardized test but rather to feel empowered in the learning process and to increase achievement in all academic classes. After working with many students who have become frustrated with the learning process based on reading difficulties, I have grown to realize how crucial this research is. After closely working with the research question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?*, through the capstone process my hope is that I have created a resource for all educators to increase the frequency that they use critical reading strategies in their classrooms.. The website I created houses a variety of ready to implement critical reading strategies, these strategies can be used with any text in any content area.

My drive to complete this capstone centered around the fact that many teachers wear many hats and are often overworked, resulting in critical reading and literacy taking a backseat in many classroom lessons. Chapter four is a reflection on the capstone process and the development of my research topic. I explore the major learning outcomes while creating this project as well as the important literature that drives the importance of teaching critical reading in the classroom. The chapter will discuss the limitations as well

as implications and next steps. The chapter ends with how this research has great potential to contribute positively to the field of teaching.

### **Major Learnings**

While reflecting on my own learning process while creating this capstone I am reminded of the reason I pursued a career as an educator and why I am so passionate about literacy skills in general. I feel that every educator has a responsibility to ensure students have the greatest opportunities to be successful in all content areas. As I pursued this capstone journey I was experiencing students in my classroom who were frustrated with learning, while researching the specifics as to why this was, I realized that many of them were actually struggling readers and their frustrations with learning were not actually about class itself but about the learning process. Through this process, I was reminded that facing challenges in any form is a crucial part of learning.

I found myself feeling a similar way while beginning my capstone research by reading and analyzing many scholarly documents relating to critical reading strategies and reading comprehension. My research process became an actual model of the struggles I was seeing in my classroom. The number of sources I was evaluating became overwhelming so I began using specific reading strategies to organize various sources and topics. I created many mind maps of topics and subtopics to help me better navigate and organize each text set. My content expert was extremely helpful throughout this process. As a former speech pathologist, and a current part of my districts teaching and learning team specializing in literacy development she had a wealth of knowledge relating to my topic, as well as valuable feedback to better enhance each component of

my project. Along with my content expert, I relied heavily on the literature of others. The summary of the literature will include the larger themes I incorporated into my project.

### **Summary of Literature Review**

Reading and literacy development are topics that are frequently discussed in the education system. When attempting to organize the vast amount of literature at my fingertips I decided to organize the sources into four different subsections based on my review of the literature. The first section analyzed the historical link between different factors that influence reading comprehension. According to Gregory and Burkman (2012), “Reading is considered a basis for all learning, and students without functional literacy are at a significant disadvantage as learners” (p. 2). Some of the influencing factors include literacy, metacognition, and motivation. Research by Cross and Paris (1988) supported that there is a relationship between cognitive awareness, the use of reading strategies, and levels of reading comprehension.

The second section is an analysis of critical reading strategies frequently used in twenty-first-century classrooms as well as the integration of technology and the various issues with some of the strategies. This section includes research on the use of vocabulary, paraphrasing, and summarization strategies. Teachers need to include a variety of vocabulary strategies in their teaching toolbox as not all words are understood the same way. According to Gregory and Burkman (2012), not all vocabulary should be taught using the same strategy. Some vocabulary words are concrete and easy to learn whereas other words have multiple meanings and require further exploration. Paraphrasing is also an essential learning skill related to text comprehension. According

to Kletzein (2009), paraphrasing can increase comprehension by merging previous knowledge with new knowledge as well as the engagement with the text by rewriting what was read to demonstrate understanding (p. 73). Summarization is important as it typically requires students to merge what is comprehended from a text with the skill of locating main ideas and recording them on paper in a new format. A study conducted by Vieiro, Pilar, García-Madruga, and Juan (1997), found that students who produced a written summary after reading a text were more successful when it came to the literal recall of information that was read. The main issue related to current critical reading practices is that they are not used frequently enough in the classroom.

The third subsection reviews literature related to critical thinking and levels of questioning as a basis for understanding a text. This section of literature focused on the connection between critical thinking, levels of questioning and the impact on comprehension. The critical thinking process is connected closely to reading as one must be able to connect prior knowledge and new information that is presented in the text as well as connecting the content that the text provides and the strategy being used to extract the content from the page (Costa, 2001). Using critical thinking in relation to critical reading is a way to allow students to connect prior knowledge with new content.

Finally, the fourth subsection includes research on how reading comprehension is measured in the classroom and whether or not it is measured effectively. The measurement of standardized reading tests can be a factor in decisions made by schools regarding each student's educational path. Reading comprehension exams should evaluate grade level comprehension and should eliminate other reading factors. Other

things that factor into reading comprehension include vocabulary range, experiences, prior knowledge, and the ability to identify the author's purpose (Barbe, 1958). Many researchers differ in opinion on whether or not comprehensive exams are effective and whether or not they truly solely measure what a student has understood from the text. A study conducted by Cutting and Scarborough (2006) found that oftentimes scores of reading comprehension exams are skewed due to the emphasis on students ability to decode and recognize words. They also argue that not all reading comprehension exams require the use of the same cognitive process, therefore, it is hard to determine whether students lack skills such as decoding or whether they truly struggle with comprehending the text. My research proved that there are many avenues in teaching reading comprehension as well as evaluating the way student comprehension is measured.

### **Implications and Limitations**

The critical reading strategies created were made to be used with a variety of text sets in any content area in all secondary classrooms. Not every single strategy will work the same way for each content area. Teachers will need to adapt strategies to fit the needs of their classrooms. These strategies could also be difficult to implement with all levels of learning. There are tips included in the website on how to differentiate the strategies for students but general education teachers may also need to work closely with special education teachers to modify strategies to ensure that needs are being met for all students. Another limitation could be buy-in from educators. Teachers may see these strategies as one more thing to plan for among their daily lessons in a profession where there never seems to be enough time. The idea behind these strategies is that they are used frequently

in content area classrooms with texts that are already being used. The strategies should be viewed as more tools for helping students be successful in understanding classroom content.

### **Contributions and Next Steps**

The biggest contribution I believe that my capstone project gives to the education profession and the education community is simply access to strategies to better student learning. In talking with many of my colleagues the profession of teaching has become frustrating as it seems that the mindset of education has shifted from building relationships and curious learners to collecting data and test scores. I feel that all thirteen of the strategies I have provided can be implemented with any classroom text with little effort. This allows overworked teachers to increase the amount of critical reading students are doing in the classroom while using the same content and text materials they already use. The website allows teachers to give students at higher reading levels more of a challenge so they continue to push themselves and be curious learners. It also suggests modifications for students who struggle with reading so they too feel confident in their abilities instead of becoming frustrated with content and learning strategies that are above their level.

My next steps with my project are to share it with as many educators as I can. My hope is that I will continue to add critical reading resources to the website as I grow as a teacher and as I collaborate and receive feedback from other educators. As those who use the strategies gain feedback from students in their classrooms regarding the reading

strategies they will be able to adapt things to fit the needs of each group of students so that all students have the opportunity to be confident in the critical reading process.

### **Summary**

My goal with my capstone project was to analyze the answers to the research question: *How can using a variety of critical reading strategies and increasing the frequency of their use impact reading comprehension among middle school students?*

When analyzing the work I have done through the capstone process I feel that I have not only created a valuable resource for myself and other teachers but that I have grown professionally as an educator. By analyzing an abundance of literature from experts related to critical reading I have gained a better understanding of best practices regarding reading strategies and their impact on reading comprehension. Based on what I learned I created a website that includes thirteen critical reading strategies that are ready to implement in any academic classroom to increase reading comprehension among students. I look forward to sharing the site with my colleagues and utilizing it in my own classroom to make all students feel empowered in their learning process by focusing on critical reading skills.

### References

- Adams, S. K., & Wittmer, D. S. (2001). "I had it first" teaching young children to solve problems peacefully. *Childhood Education*, 78(1), 10-16.  
doi:10.1080/00094056.2001.10521680
- An, S. (2013). Schema theory in reading. *Theory and Practice in Language Studies*, 3(1), 130. doi:10.4304/tpls.3.1.130-134
- Anderson, R. C., & Pearson, P. D. (1984). *A schema-theoretic view of basic processes in reading comprehension* Longman. Retrieved from Proquest database.
- Barbe, W. (1958). Measuring reading comprehension. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 32(6), 343-345.
- Beck, Isabel L., McKeown, Margaret G., & Kucan, Linda. (2013). *Guilford Press*, 2013.
- Clarke, P., Truelove, E., Hulme, C., & Snowling, M. (2013). *Developing Reading Comprehension*. Hoboken: Wiley.
- Costa, A. L. (2001). *Developing minds: A resource book for teaching thinking* (3rd ed.). Alexandria, Va.: Association for Supervision and Curriculum Development.
- Costa, A. L., & Kallick, B. . (2015). 5 strategies for questioning with intention. *Educational Leadership*, 73, 66. Retrieved from Proquest database.
- Cross, D. R., & Paris, S. G. (1988). Developmental and instructional analyses of children's metacognition and reading comprehension. *Journal of Educational Psychology*, 80(2), 131-142. doi:10.1037/0022-0663.80.2.131



- Cutting, L. E., & Scarborough, H. S. (2006). Prediction of reading comprehension: Relative contributions of word recognition, language proficiency, and other cognitive skills can depend on how comprehension is measured. *Scientific Studies of Reading, 10*(3), 277-299. doi:10.1207/s1532799xssr1003\_5
- DeChenne, D. (1993). Schema theory, educational applications, and a model for teaching labor history. *The History Teacher, 26*(2), 175-189. doi:10.2307/494814
- Dewitz, P. & Dewitz, P. K. (2003). They can read the words, but they can't understand: Refining comprehension assessment. *The Reading Teacher, 56*(5), 422-435. Retrieved from Jstor database.
- Facione, P. A. (1998). Critical thinking: What it is, why it counts., Retrieved June 9, 2004.
- Gehrke, D., & Turban, E. (1999, January). Determinants of successful website design: relative importance and recommendations for effectiveness. In *hicss* (p. 5042).
- Ghanizadeh, A. (2017). The interplay between reflective thinking, critical thinking, self-monitoring, and academic achievement in higher education. *Higher Education, 74*(1), 101-114. doi:10.1007/s10734-016-0031-y
- Goodlad, J. I. (1984). *A place called school*. New York u.a: McGraw-Hill.
- Gosen, M. N., Berenst, J., & de Glopper, K. (2015). Problem-solving during shared reading at kindergarten. *Classroom Discourse, 6*(3), 175-197. doi:10.1080/19463014.2014.991339
- Gregory, G., & Burkman, A. (2012). Differentiated literacy strategies for English language learners, grades K-6. Thousand Oaks, Calif.: Corwin.

- Grimm, K. J. (2008). Longitudinal associations between reading and mathematics achievement. *Developmental Neuropsychology*, 33(3), 410-426.  
doi:10.1080/87565640801982486
- Hagaman, J. L., Casey, K. J., & Reid, R. (2012). The effects of the paraphrasing strategy on the reading comprehension of young students. *Remedial and Special Education*, 33(2), 110-123. doi:10.1177/0741932510364548
- Hernandez, D. J. (2011). Double Jeopardy: How third-grade reading skills, & poverty influence high school graduation. Annie E. Casey Foundation.
- Hulme, C. & Snowling, M. J. (2011). Children's reading comprehension difficulties: Nature, causes, and treatments. *Current Directions in Psychological Science*, 20(3), 139-142. doi:10.1177/0963721411408673
- Intrinsic and Extrinsic Motivation. (2009). In E. M. Anderman & L. H. Anderman (Eds.), *Psychology of Classroom Learning: An Encyclopedia* (Vol. 1, pp. 513-517). Detroit, MI: Macmillan Reference USA. Retrieved from [http://link.galegroup.com.ezproxy.hamline.edu:2048/apps/doc/CX3027800148/GVRL?u=clic\\_hamline&sid=GVRL&xid=ceb4032f](http://link.galegroup.com.ezproxy.hamline.edu:2048/apps/doc/CX3027800148/GVRL?u=clic_hamline&sid=GVRL&xid=ceb4032f)
- Kay, S. (1946). Critical reading: It's importance and development. *English Journal*, 35, 380.
- Khan, B. H. (Ed.). (1997). *Web-based instruction*. Educational Technology.
- Kim, J. S., Hemphill, L., Troyer, M., Thomson, J. M., Jones, S. M., LaRusso, M. D., & Donovan, S. (2017). Engaging struggling adolescent readers to improve reading skills. *Reading Research Quarterly*, 52(3), 357-382. doi:10.1002/rrq.171

- Kletzien, S. B. (2009). Paraphrasing: An Effective Comprehension Strategy. *Reading Teacher, 63*(1), 73-77.
- Lecce, S., Zocchi, S., Pagnin, A., Palladino, P., & Taumoepeau, M. (2010). Reading minds: The relation between children's mental state knowledge and their metaknowledge about reading. *Child Development, 81*(6), 1876-1893.  
doi:10.1111/j.1467-8624.2010.01516.x
- Li, Q. (2014). Schema theory and the teaching of college English news listening. *Theory and Practice in Language Studies, 4*(7), 1469. doi:10.4304/tpls.4.7.1469-1475
- Lieberman, A., & Pointer Mace, D. (2010). Making practice public: Teacher learning in the 21st century. *Journal of Teacher Education, 61*(1-2), 77-88.  
doi:10.1177/0022487109347319
- Marloes, M. L., Muijselaar, M., Swart, N., Steenbeek-Planting, E., Droop, M., Verhoeven, L., & De Jong, P. (2017). Developmental relations between reading comprehension and reading strategies. *Scientific Studies of Reading, 21*(3), 194-209.
- Marzano, R. J. (2009). Six steps to better vocabulary instruction (the art and science of teaching). *Educational Leadership, 67*, 83. Retrieved from Proquest database.
- McGeown, S. P., Duncan, L. G., Griffiths, Y. M., & Stothard, S. E. (2015). Exploring the relationship between adolescent's reading skills, reading motivation and reading habits. *Reading and Writing, 28*(4), 545-569. doi:10.1007/s11145-014-9537-9
- McNamara, D.S. (2007) Reading Comprehension Strategies. Mahwah, NJ: Lawrence E Associates.

- Minnesota Report Card. Minnesota Department of Education., (2018).
- Murnane, R., Sawhill, I., & Snow, C. (2012). Literacy challenges for the twenty-first century: Introducing the issue. *The Future of Children*, 22(2), 3-15.
- Myers, M., & Paris, S. G. (1978). Children's metacognitive knowledge about reading. *Journal of Educational Psychology*, 70(5), 680-690.  
doi:10.1037//0022-0663.70.5.680
- Nagy, & W. (1988). *Teaching vocabulary to improve reading comprehension*.
- Nassaji, H. (2007). Schema theory and knowledge-based processes in second language reading comprehension: A need for alternative perspectives. *Language Learning*, 57(1), 79-113. doi:10.1111/j.1467-9922.2007.00413.x
- Ness, M. (2007). Reading comprehension strategies in secondary content-area classrooms. *The Phi Delta Kappan*, 89(3), 229-231.  
doi:10.1177/003172170708900314
- Pugh, P. M., & Tschannen-Moran, M. (2016). Influence of a school district's advancement via individual determination (AVID) program on self-efficacy and other indicators of student achievement. *NASSP Bulletin*, 100(3), 141-158.  
doi:10.1177/0192636516679261
- Ryan, F. L. (1973). Differentiated effects of levels of questioning on student achievement. *The Journal of Experimental Education*, 41(3), 63-67.  
doi:10.1080/00220973.1973.11011411
- Sabatini, J., Albro, E., O'Reilly, T. (2012). *Measuring up advances in how we assess reading ability*. R&L education.

- Salkind, N. J. (2008). *Encyclopedia of educational psychology*
- Schaffner, E., Schiefele, U. & Ulferts, H. (2013). Reading amount as a mediator of the effects of intrinsic and extrinsic reading motivation on reading comprehension. *Reading Research Quarterly, 48*(4), 369-385. doi:10.1002/rrq.52
- Selsky, D. (1990). The condition of education and reading proficiency. *Library Journal*  
Retrieved from Proquest database.
- Snow, C. E, Burns, S. M., Griffin, P. (eds) (1998). P children. *Untitled document (22)*
- Spirgel, A., & Delaney, P. (2016). Does writing summaries improve memory for text? *Educational Psychology Review, 28*(1), 171-196. doi:10.1007/s10648-014-9290-2
- Tornoe, R. (2015, Dec 1,). User (not) friendly: when it comes to newspaper websites, simpler is better. *Editor & Publisher, 148, 26.*
- Uccelli, P. (2018). Beyond reading comprehension: Exploring the additional contribution of core academic language skills to early adolescents' written summaries. *Reading and Writing, 1-31.*
- Van den Broek, P., & Espin, C. A. (2012). Connecting cognitive theory and assessment: measuring individual differences in reading comprehension. *School Psychology Review, 41*(3), 315-325.
- Vieiro, P., & Garcia-Madruga, J. (1997). An analysis of story comprehension through spoken and written summaries in school-age children. *Reading and Writing, 9* (1), 41-53. doi:1007932429184