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Action Research Study on the Gradual Release of Responsibility, Critical Thinking Skills and Use of Intertextuality in a Midwest Suburban High School Setting

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A Dissertation submitted to the Education Faculty of Lindenwood University

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This dissertation has been approved in partial fulfillment of the requirements for the degree of

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Dr. Lynda Leavitt, Dissertation Chair — 4/29/2016 Date

Dr. Beth Kania-Gosche, Committee Member — 4/29/2016 Date

Dr. Joseph Alsobrook, Committee Member — 4/29/2016 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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Signature: Donna Canan Date: 4-29-2016

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Abstract

In this study, a high school teacher's applied various pedagogical, critical thinking, and reading strategies within a high school classroom. As students prepare to become productive members of a democratic society in the 21st century, some students need focused literacy instruction to meet the increasing literacy demands; students who lag behind in critical thinking have a disadvantage. This teacher's action research study with struggling high school readers investigated whether implementing the pedagogical Gradual Release of Responsibility model (GRR) while engaging students with intertextual texts (juxtaposing two or more texts) within a reading community increased their critical thinking skills.

The participants included 35 ninth and tenth grade struggling readers in reading classes. The researcher used Reading Plus (2014) online silent reading comprehension, fluency, and vocabulary assessment; Fountas and Pinnell (2014) oral reading and silent reading comprehension assessment; the Weltzer-Ward, Baltes and Lynn's (2008) Critical Thinking Assessment Framework (TAF); high school students' self-reflections with teacher-made prompts; and the researcher's action research journal to determine and monitor high school students' reading and critical thinking progress. Teacher-made rubric tools measured critical thinking with 10 high school student blogs in response to high school teacher-made prompts reflecting the state's spring standardized assessment. Within the reading class structure, the researcher created a university partnership that consisted of one education class containing students from various disciplines who communicated and offered insights and feedback throughout the high school students' 10 blogs. The researcher offered strategies and designed the high school reading course to

encourage student choice and autonomy and made teaching modifications based on students' behavioral needs, academic progress, and struggles.

Data analysis revealed 35 ninth and tenth grade students increased their critical thinking skills over the 2014-2015 school year; however, time constraint challenges and multiple reading program components negated drawing a clear picture of which aspect held the highest value. The researcher's journal noted that parent communication, student conferences, flexible due dates, individualized instructional scaffolding, and the online reading program contributed to students' critical thinking. The journal revealed a consistent teacher expectation for students to engage in the critical thinking progress.

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Chapter One: Introduction

In the 1800's both Ralph Waldo Emerson and Walt Whitman (1871) viewed reading and thinking as an integral part of democracy in America. In his 1871 essay *Democratic Vistas,* Whitman wrote, "Books are to be call'd for, and supplied, on the assumption that the process of reading is not a half sleep, but, in highest sense, an exercise, a gymnast's struggle; . . . the reader [does] something for himself " (para. 146). Similarly, professors Boatright and Faust (2013) saw Emerson's America as including individuals who viewed "reading as rife with potential for engaging the world in order to change it" (p. 7), which led to the conclusion, "learning to read changes the world because the world we live in changes as we learn to read it differently" (p. 3).

Building onto this American democratic thinking, Gainer (2012) claimed in the 21st century, "A healthy and vibrant democracy requires an engaged citizenry who think critically, take positions on complicated issues, and work collaboratively to solve problems" (para. 1). In a global society, teachers expected students to grapple with complex ideas and shift through, and make meaning of continually increasing complex texts. According to Wolk (2013), "One of the primary aims of our schools is supposed to be to educate children and young adults to be caretakers of our fragile and complex democracy" (p. 45). For teachers, therefore, one of the challenges and opportunities faced included providing models, strategies, and texts that led to independence for adolescents so they could "inquire into important ideas that matter to [them], society, and the world" (Wolk, 2013, p. 45). Therefore, the researcher believed in the need to prepare students to become active members of a democratic citizenry as a goal of the school system.

Reflecting this belief, the suburban public school system in the Midwestern United States where this study originated, placed an emphasis on students navigating through a complex and ever changing world. The researched school district's mission statement included an emphasis "to develop students who add value to our dynamic world using knowledge, character, and problem solving skills" (Mission Statement, 2013-2014). Numerated under this statement, among others, the district listed values of community, "confidence in [students'] . . . abilit[ies] to contribute to a global society, and "find meaning in life-long learning" (para. 2). Teachers in this school district's high school used these tenets as guiding principles in their classrooms. The high school community supported "innovative educational programs which focus on what today's youth must know and learn to become tomorrow's leaders" (Mission Statement, 2013-2014).

The researched state required each high school student have 24 credits to graduate, and the state assigned each course a certain number of credits. The reading class had three credits for the year. The staff that determined a student's placement in the Reading Focus reading class included counselors, administrators, and reading specialists. The researcher was part of a district three-person team that consisted of another English teacher and an English Language Arts facilitator who designed the curriculum. The high school administrators and counselors decided this Reading Focus was a three-credit elective class for ninth through 12th grade struggling readers. The reading teacher's student goals for this course included: critical thinking, grade level reading, purposeful reading, and to encourage students to perceive reading as edification. For the purpose of this action research study, the researcher focused on ninth and tenth grade students.

According to Missouri Department of Elementary and Secondary Education (MODESE, 2015), the high school's overall demographics included 1,823 students: 25.3 % total minority with 2% Asian, 18.10% Black, 2% Hispanic, .2% Indian, 3% Multi-race, and 74.7% White—the majority population (p. 1). Of the total population, economically disadvantaged Free and Reduced Lunch students comprised 14.9% (p. 1).

Statement of the Purpose

In this study, this researcher aimed to conduct qualitative action research to examine if developing blogs within a reading community with university students, high school staff, and high school students, establishing a GRR pedagogical approach, and using intertextual texts that incorporated teacher and student choice within the context of a rich literacy environment led to increased achievement for struggling readers' critical thinking skills during the 2014-2015 school year. The students also participated in a reading blog with university students, parents, staff members, and peers to develop students' critical thinking skills. The researcher believed utilizing the GRR model while students engaged with challenging questions would prepare them for the higher level of questioning, a component of the Missouri Smarter Balanced End-of-Course exam, a state requirement for all tenth grade students at the time of the study (Smarter Balanced Assessment Consortium, 2012b, para. 1–4) and prepare them for 21st century skills needed in a democratic society. In addition, this researcher kept an ongoing action research journal for noting instruction modifications, behavioral concerns, and interactions with parents, staff, communication with university students, and a university liaison in order to document concerns, as well as, successes with various components of

the classroom lessons, procedures, and protocols as the researcher made various adjustments.

Rationale

At the time of this study and according to MODESE (2014a), every tenth grade student in the state was required to participate in the End-of-Course Exam (EOC), that included questions aligned to the Common Core State Standards (CCSS) (MODESE, 2014b, para. 5). This was the first implementation of this specific test tenth grade students would take, and no previous studies existed on how a classroom structure for struggling readers using a GRR model and blogs with challenging intertextual texts within a community of readers prepared students for the types of questions that appeared on the Smarter Balanced test or increased their critical thinking skills. The National Governors Association Center for Best Practices and Council of Chief State School (NGACBP-CCSS, 2015b) noted the new "knowledge demands" for both literary and non-fiction texts included "high intertextuality (many references/allusions to other texts and citations of other texts)" (NGACBP-CCSS, 2015b), (p. 6). In addition to the types of texts required on standardized assessments and knowledge development, self-selected and pleasure reading serves as a valued aspect of any reading program. Literacy educator Duncan (2010) stated, "Those who read regularly for pleasure are healthier, more active citizens" (p. 91). This quote suggested to the researcher that classrooms where students select materials at their independent level rather than hitting their frustration level are valuable. However, this study aimed to investigate a component of the reading program in addition to self-selected texts, the on-line Reading Plus program, and texts with accompanying reading strategies, so struggling readers can possibly improve critical

thinking in preparation for the upcoming challenges of the next tests, but more importantly prepare them with skills for 21st century jobs.

According to Afflerbach, Cho, Kim, Crassas, and Doyle (2013), "Conceptualizing reading as a blend of cognition and affect should help inform curriculum and instruction that attends to all aspects of students' reading development" (p. 447). Also, Burns, and Olenchak (1989) asserted, "Having ability or skill in generic critical thinking means being able to correctly assess whether an inference, regardless of content, is acceptable or not, and being able to explain why the reasoning is good or faulty" (p. 2).

Aloqaili (2012) suggested, "A strong relationship among reading comprehension, critical thinking, and prior knowledge" (p. 39) is important. Therefore, the researcher believed combining both reading instruction with prompts and assignments that promote critical thinking may improve reading comprehension, increase knowledge, develop critical thinking, and increase overall learning for edification. The researcher theorized that students may then transfer these skills from a school environment to post-secondary work or school, and evolve into informed citizens with established habits of learning throughout their lifetimes.

The researcher chose the time limit of at least one semester because, according to Solon (2007),

> While it may not yet be beyond reasonable doubt . . . critical thinking instruction . . . causes enhanced reasoning . . . there is . . . a growing body of evidence . . . some approaches can be very effective even in much less than a full semester length special course intervention. (p. 4)

This study of psychology college students "critical thinking enrichment [included] . . . 10 homework reading and writing assignments spread roughly equally throughout the semester. Each assignment had both reading and writing components (for a total of about 20 hours during the school term)" (Solon, 2007, p. 4). These results indicated, "In a college classroom study . . . a moderate infusion of critical thinking material emphasizing active learning principles and guided practice can produce significant and substantive growth in student critical thinking ability" (p. 9). The same study further suggested, "There is a clear continuing need for more and better quality studies of critical thinking infusion" (Solon, 2007, p. 9). Therefore, this action research study and the proposed timeline of data collection added to the body of literature. Even though the previously mentioned study included college students, Marin and Halpern (2011) suggested, "Despite the fact that the need for critical thinking instruction at the high school level is widely known and supported in theory, in reality very little specific curriculum for explicit critical thinking instruction for secondary students is available" (p. 11).

This researcher's observation among the investigated group of ninth and tenth grade struggling readers showed some evidence of critical thinking similar to the researcher's previously taught Honor students, but the struggling readers needed structures in place to lead them from using guided strategies to independence. According to Lapp, Moss, and Rowsell (2012), "[GRR] mentors learners as [students] recursively move from being novices to capable thinkers, learning new tasks" (p. 368). In addition, using blogs served as a justification for developing a reading community and created a means with which students enhanced their critical thinking skills. According to Woodly (2008), "Blogs offer information that is distinct in its form and content, offering readers a

democratic experience that cannot be offered by any other traditional form" (pp. 114-115). Zheng (2013) asserted that blogs "not only [serve as] a way to engage students in active and collaborative learning, but also . . . bring students to the world of open knowledge publishing and sharing" (p. 228); thus, potentially building a community of readers inside and outside of the classroom. Therefore, the validation for using an action research methodology stemmed from the concept that building a community of readers through the GRR model—using blogs as a forum for expression; having staff, college students, and parents respond on the blogs; and using intertextual prompts aligned with the Smarter Balanced EOC—might help prepare students to handle challenging texts that exceeded their baseline reading levels, particularly critical thinking skills.

Research Questions

This researcher designed the action research study to support the following research questions:

RQ 1. How does the use of intertextuality and the establishment of blogs as a communication forum, examine student ideas, allow students to express their opinions, and respond to others' viewpoints, as a way to promote critical thinking?

RQ 2. How do struggling high school readers develop critical thinking as they respond to prompts that mirror the upcoming Smarter Balanced test that the state will require all tenth graders take?

RQ 3. How does reading instruction and course design affect struggling high school readers' critical thinking and help prepare them for the upcoming tenth grade Smarter Balanced test?

RQ 4. How does the Gradual Release of Responsibility model in connection with a reading community blog with prompts that replicate the Smarter Balanced test, help develop and improve struggling high school readers' critical thinking?

RQ 5. How do reading strategies, structure, and collaboration affect student learning in a suburban high school?

RQ 6. Since the Smarter Balanced test requires that students read at or beyond grade level, how do teachers prepare struggling readers to experience success when they are two grade levels behind in comprehension?

RQ 7. How does the teacher modify teaching strategies based on analysis of students' critical thinking progress?

Limitations of Study

There were time limitations of one school year, and students sometimes moved in and out of the program throughout the year either because they had arrived at grade level mastery or physically moved into and out of the school district; however, this researcher believed that taking students through this process would provide evidence of their critical thinking growth. According to Reswick (1994), "qualitative research [has an] interactive or closed-loop feedback nature" (para. 12). The subjects and the researcher depended on each other and, "as data accumulate and are reduced, the researcher may well redefine the model and alter the study design employing a refining method called comparative analysis" (Reswick, 1994, para. 12). The fluidity of the researcher and participants' interaction in the study had limitations in that the process might have altered the predicted outcome. Creswell (2013) argued, qualitative researchers "also make an

interpretation of what they find, an interpretation shaped by the researchers' own experiences and backgrounds" (p. 9). These researchers looked at themes and through the research process "meaning making [was] always social, arising in and out of interaction with a human community" (Creswell, 2013, p. 9). Creswell (2013) concluded human beings continually changed, brought their cultural influences, and reacted to those around them during the research process. In the year 2014-2015, this researcher observed, recorded, and examined data and experiences throughout the school year. As the teacher, this researcher adhered to objectives and altered behavior based on reflection by adjusting lesson plans for individuals to respect their own time- frames to learn.

Definition of Terms

Action Research: "Instead of searching for powerful generalizations, action researchers (often teachers or other researchers) focus on getting information that will enable them to change conditions in a particular situation in which they are personally involved" (Fraenkel, Wallen, & Hyun, 2012, p. 14).

Common Core State Standards: The NGACBP-CCSS stated the purpose of CCSS (2012) was to

> provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards were designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy. (Implementing the Common Core State Standards, 2012, para. 1)

Critical Thinking: Critical thinking

> consists of seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from . . . facts, solving problems, and so forth. (Willingham, 2007, p. 8)

Critical Thinking Criteria Matrix: For the purpose of this study, this researcher chose to use the "Cognitive Rigor Matrix. The Smarter Balanced Content Specifications for English Language Arts [and] draws from both Bloom's (revised) Taxonomy of Educational Objectives [a critical thinking hierarchical sequence] and Webb's Depth-of-Knowledge [hierarchical knowledge sequence]" (as cited in Gendron, 2012, p. 15). The Appendix A for model and Appendix G contain authors' approval for instrument use.

Gradual Release of Responsibility: Pearson and Gallagher (1983) described this pedagogical framework as follows: the teacher first sets examples for "all or most of the responsibility for task completion. When the student take[s] all or most of that responsibility, she 'practic[es]' or 'appl[ies]' that strategy; . . . in between these two extremes is the gradual release of responsibility" (p. 35).

Integrated Critical Thinking Assessment (TAF): Weltzer-Ward et al. (2008) suggested that TAF's goal was to "establish a theoretical…framework which would support assessment of process, structure, and quality at the level of an individual post or statement . . . to characterize overall discussion" (p. 7). In addition, they concluded this assessment established a "framework to answer questions about critical thinking process and quality . . . which aid a comparison with other online discussion activities" (p. 14) (Appendix B).

Intertextuality: According to Kristeva (as cited in D'Angelo, 2010), "Every text is connected to other texts by citations, quotations, allusions, borrowings, adaptations, appropriations, parody, pastiche, imitation. Every text is in a dialogical relationship with other texts intertextuality describes the relationships that exist between and among texts" (p. 33).

Reading Assessments (Reading Plus and Fountas and Pinnell): Reading Plus (2014) measures "both individual capacity (comprehension level and vocabulary level) and efficiency (reading rate)" (para. 2). Fountas and Pinnell (2014) designed a reading assessment that developed into a system that "reveals a wealth of information about the reader, including the reader's accuracy and self-corrections, comprehension, and fluency" (para. 2).

Reading Blog: According to Leu et al. (2011), online reading comprehension includes "reading online to critically evaluate information [and] to synthesize information" (p. 3). This researcher defined Reading Blog as an online Website that contains readings where students post their thinking in response to prompts and then others participate in reflective comment.

Reading Community Inquiry Model: Garrison, Anderson, and Archer (2000) defined a Reading Community Inquiry model as

> a worthwhile educational experience . . . composed of teachers and students. The model . . . assumes that learning occurs within the Community through the interaction of three core elements: . . . cognitive presence, social presence, and teaching presence. (p. 88)

The authors suggested this model is manifested in the following ways: "cognitive presence: triggering event, exploration, integration, [and] resolution . . . ; social presence: emotional expression, open communication, and group cohesion . . . ; and teaching presence: instructional management, building understanding, and direct instruction" (p. 89).

Struggling Readers: For the purpose of this study, struggling readers were at least two grade levels behind according to Reading Plus on-line program and Fountas and Pinnell (2014) reading assessments.

The Smarter Balanced Assessment Consortium (Smarter Balanced):

> a state-led consortium working to develop next-generation assessments that accurately measure student progress toward college-and career-readiness. Smarter Balanced is one of two multistate consortia awarded funding from the U.S. Department of Education in 2010 to develop an assessment system aligned to the Common Core State Standards (CCSS) by the 2014-15 school year. (The Smarter Balanced Assessment Consortium, 2012b, para. 1)

21st Century Skills: According to Kay and Greenhill (2013), "The education community and the public . . . identified four skills that were deemed to be the highest priorities for educators: the 4Cs-critical thinking, communication, collaboration, and creativity" (p. xiv).

Summary

This researcher conducted an action research study with struggling high school readers to determine whether implementing the GRR model (GRR) while engaging students with intertextual texts within a reading community increased their critical

thinking skills. During the data collection phase, students participated in a reading blog with college students, parents, and/or staff members, and peers. The researcher believed utilizing the GRR model while students engaged with challenging questions would prepare them for a higher level of questioning—a component of the Missouri Smarter Balanced End-of-Course exam required for all tenth grade students (MODESE, 2010, para. 1-4). According to MODESE (2014a), "10th graders in the state participated in the End-of-Course Exam (EOC), which included questions aligned to Common Core State Standards" (para. 5). No current studies existed on how a classroom structure for struggling readers using a GRR model and blogs with challenging intertextual texts within a community of readers, might prepare students for questions on the Smarter Balanced test and increase critical thinking skills. The NGACBP-CCSS (2015b) called for new "knowledge demands" for both literary and non-fiction texts that include "high intertextuality (many references/allusions to other texts" (NGACBP-CCSS, 2015a, p. 6). This study aimed to investigate a component of the reading program in addition to self-selected texts and the on-line Reading Plus program, and texts with accompanying reading strategies, to help readers improve critical thinking, prepare them for upcoming assessments, and for their own edification, but more importantly to develop 21st century skills needed in the work place.

The subsequent chapters include a Review of the Literature in Chapter Two, which contains literature that supports each component of this action research study; methodology in Chapter Three that shares the researcher's process and procedures; Chapter Four that includes emerging themes, coding methods, and results; and Chapter

Five that includes reflection, discussion, emerging themes, and implications for further research.

Chapter Two: The Literature Review

The researcher examined current scholarly publications, literature, and educational reports that centered on the importance and effectiveness of teaching critical thinking skills and reading comprehension to struggling high school readers within a best practices pedagogical framework. This literature review reflects a compilation of how constructing a critical thinking structure created a propensity for students' readiness for the development of 21st century skills. The literature review includes: defining 21st century skills and critical thinking; examining standardized assessments; developing reading comprehension and critical thinking strategies; looking at the importance of intertextuality; engaging in learning through blogs; and creating a class culture of independence through choice, voice, and reflection. These studies and literature offered the researcher various components and fluidity of factors that overlap and are intertwined to contribute to the development of critical thinking in the classroom. Furthermore, this investigation led the researcher to studies on how the teachers' intentionality within the classroom setting influenced the enhancement of critical thinking.

21st Century Skills and Critical Thinking

According to Schleicher (2015), a director in the Organisation for Economic Co-operation and Development (OECD), "Education is about reading to learn and developing the capacity and motivation to identify, understand, interpret, create and communicate knowledge" (para. 15). This organization represents 34 member countries (Organisation for Economic Co-operation and Development [OECD], 2015, para. 1) around the world, and Schleicher reflected the group's viewpoint regarding what students needed to learn in preparation for the 21st century. Specifically related to critical

thinking, Shaw (2014) suggested, “Recent educational discourse is full of references to the value of critical thinking as a 21st-century skill” (para. 1) creating an educational purpose that cultivates and promotes this type of thinking. Dewey (2010), an American educational scholar, used the term reflective thinking as an “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends” (p. 6). Dewey implied that educators value a future rooted in the past and not just a trend but as a belief reflected in the 21st century, as well. The Partnership for 21st Century Learning (2015) stated students across the world “reason effectively . . . use systems thinking . . . [and] make judgments and decisions” (para. 1). Willingham (2007) offered a non-educational jargon way of defining critical thinking that involves examining opposite viewpoints of an argument, having the ability to change perspective when additional information comes into the perspective, throwing out former theories if new informational challenges former beliefs, staying objective, and presenting alternative solutions, among others.

Critical Thinking Relevance

Among various cultures and age groups, researchers found that teaching critical thinking yielded positive results (Moore, 2013; Ornstein, Pajak, & Ornstein, 2015). Researchers stated the instructor’s job is “to capture the students’ imaginations, to have them explore ideas and issues, support arguments, and draw conclusions-what some of us might call critical thinking” (Ornstein et al.,2015, p. 83). According to Moore (2013), researchers spent time dissecting the term critical thinking, specifically how academies proceeded to handle this concept in their classrooms. The purpose of this study centered on one university in Australia and “involved interviewing academics from a range of

disciplines: philosophy, history and literary/cultural studies" (p. 509). In addition, the researcher selected courses that demanded higher order thinking and that students took simultaneously early in their college careers. Moore's (2013) procedure consisted of 17 seasoned professors, both male and female, who answered questions about how they saw the relevancy of using critical thinking in their classroom, how they defined the term, and how they applied this concept to their teaching methodology. The researcher concluded that despite the concept's somewhat elusive nature, the researcher found the students reflected on the value their professors placed on this concept and deemed the idea of teaching critical thinking worthy of study.

As the previous study investigated the college environment, Pinkney and Shaughnessy (2013) claimed high schools lacked a choice since No Child Left Behind demanded that educators "teach critical thinking" (p. 346) and concluded "critical thinking is a skill which makes people fully human" (p. 351). Prior to high school, Shu Ching and Tung-Yu (2009) aimed to investigate "the effects of cultivating [critical thinking] skills within civic education to achieve its highest potential" (p. 31). Over a 10-week period, the researchers examined both teaching and learning in two eighth grade Taiwanese classrooms. The researchers concluded that although some aspects of critical thinking did not develop, the experimental group with instruction, scaffolding, and student independence as the time progressed, revealed some areas of critical thinking developed, as well as, student self-perception of their critical thinking improved and increased their understanding of divergent opinions. Preus (2012) aimed to study what "strategies . . . tasks and assessments" (p. 61) teachers implemented in their 7th and 8th grade classrooms, as well as, their teaching philosophy about "higher order thinking" (p.

61). The context of the study represented a "diverse public secondary school that successfully implemented authentic instruction" (Preus, 2012, p. 61) and included teachers who offered this approach to all demographic groups represented within the school. Preus (2012) concluded, teachers who created an environment that looked at encouraging students to provide evidence for their claims found success. The research participants (professors) managed to foster high quality intellectual work for a significant portion of class time and expected all students to complete tasks that required construction of knowledge, disciplined inquiry, and value beyond school (Preus, 2012, p. 76). The researcher noted student engagement and higher order thinking development within this context showed a slightly higher increase. In English and reading high school classrooms, Alsup (2013) claimed reading literature and engagement in related activities developed critical thinking and further claimed "literary fiction, or fictional narratives resulted not only in critical thinking, close reading, and analytical writing but also in personal enjoyment, cognitive engagement, and an increased ability to empathize or relate to others" (p. 182). Alsup (2013) surmised the importance of immersing in a narrative led to critical thinking and argued against solely using non-fiction in the classroom as some educators suggested since the CCSS placed an emphasis on non-fiction and excerpts over the longer narrative works.

State Testing Mandates and Student Preparation

According to Valencia and Wixson (2013), most states supported the "Common Core State Standards for English Language Arts" (p. 181) among other disciplines. Both argued teachers and administrators intended to adhere to required standards and frameworks and then aimed to embed these elements into teaching; however, they

cautioned educators should look closely at the standards and their implementation to avoid derailment into "details" (p. 181) and over simplification would lead to ineffective teaching. These researchers highlighted the necessity of teaching "complexity . . . [using] regular practice with complex text[s] . . . [and] academic language . . . reading and writing . . . from literary and information text, [and] . . . building engagement with content rich text" (p. 183). These practitioners emphasized, "Teaching students how to "'think with text'" (p. 182) and the "Anchor Standards for Reading [should] guide instruction" (p. 182). The authors believed adhering to the overarching structure and aim of the Standards should shape instruction.

The CCSS and the state's expectations aligned and prepared teachers to plan their lessons and units. The NGACBP-CCSS (2015a) summarized the previous criteria for teaching English Language Arts Standards (ELA): students should "read stories and literature, [and] more complex texts. This stresses critical-thinking, problem-solving, and analytical skills that are required for success in college, career, and life" (para. 2). The state tests embedded critical thinking into their assessments. Lovette (2013) examined teachers' preparedness in instructing reading as described in the CCSS, and looked at each state to see how colleges and universities taught their teachers. Additional concepts included the state's reading certification requirements, course catalogs, and various related reading descriptors Lovette found online. Although some states required reading development coursework, many including Missouri, did not. Lovette (2013) noted after this licensure examination overview, although the CCSS and other assessments stressed the importance of reading, teachers left their institutions without adequate coursework. Although one goal of the CCSS aimed to provide teachers "with a common set of

standards to guide instruction, the discrepant expectations for the reading development knowledge of secondary ELA teachers . . . may prove to be a barrier to effectively implementing the standards in ELA" (Lovette, 2013, p. 200). The author suggested the current group of teachers were not prepared, and needed skills, a knowledge base, and access to centralized research based resources.

Since the CCSS categorized critical thinking under the reading standards, these two areas linked together. According to Herman and Linn (2013) in a national report, "Two consortia, the Smarter Balanced Assessment Consortium (Smarter Balanced) and the Partnership for Assessment of Readiness for College and Careers (PARCC)" predicted that in the new state assessments students will, among other areas, need to "master . . . and . . . apply core academic content and cognitive strategies related to complex thinking" (p. 4). Supported by the William and Flora Hewlett Foundation, the authors studied how Webb's (2002) concept of Depth of Knowledge (DOK) applied to the upcoming Smarter Balanced test. This concept listed four areas, each building on the other, with the last area reflected in the following statement: "Higher order thinking is central and knowledge is deep at Level 4 (para. 5). Herman and Linn (2013) concluded students should know the following: how to "analyze and synthesize information from multiple sources, examine and explain alternative perspectives across a variety of sources, [and] describe and illustrate how common themes are found across texts from different cultures" (para. 5).

The authors of the foundation of the Smarter Balanced assessment tools valued and incorporated research of evidence based claims. Mislevy, Almond, and Lukas (2003) suggested "Evidence-centered assessment design (ECD) . . . provides a conceptual design

framework for the elements of a coherent assessment, at a level of generality that supports a broad range of assessment types" (p. 1). Smarter Balanced Assessment Consortium (2012b) reported Missouri students began this assessment in 2014-15. Chandler-Olcott (2013), "argue[d] that exploration of the media coverage . . . [promoted their] thinking critically...in an urban high school" (p. 281). Raskoff and Matsumoto (2015) concurred and argued, "Whether trying to produce successful science students, or trying to produce successful citizens, our society's need for a population that can critically evaluate sources of information has never been more urgent" (p. 2) within all types of texts.

In Chandler-Olcott's (2013) study, the researcher structured a unit where students used evidence to support their claims. The methodology included instructing students to read two newspaper columns from two authors about current events: one about the Boston City bombings and the other about how "ethnic violence might have motivated the Boston suspects" (p. 282). Students found the main ideas and wrote personal responses, then read on-line comments in response to the readings and envisaged various viewpoints. The students deciphered their responses, which aligned with evidence or with their own point of views, and filled out a chart with four categories: "a comment with which you agreed that you felt was well supported by evidence from text [and] a comment with which you disagreed that you felt was well supported" (p. 284). In the second part of Chandler-Olcott's (2013) chart, students indicated the same as previously stated but shared their opinions about the statements in the text poorly supported. Afterward, they gathered opinions from others outside of their class community to recheck their own viewpoints, and finally wrote on-line comments, which opened up a

larger audience. The researcher's methodology encouraged students' to use critical thinking and their examination of reasoning and evidence to support opinions after close analysis of others' responses and their own biases. Chandler-Olcott (2013) believed this study showed students learning multiple angles on the same topics and demonstrated how teachers can construct lessons that teach students to objectively look at evidence before forming arguments

Reading Comprehension and Critical Thinking

Smith (1988) surmised, "Reading cannot be separated from thinking. Reading is a thought-full activity; there is no difference between reading and any other kind of thought" (p. 21). Magnusson and Kalinnikova-Magnusson (2014) concurred: "by reading a text, the reader also creates an intention towards the text, to bring meaning to the text." (p. 108). Patesan, Balagiu, Zechia, and Alibec (2014) claimed a correlation existed between critical thinking, reading comprehension, and high level learning in general; however, Beers and Probst (2013) noted without the reader's interaction with the text, meaning would not be established; "the text awakens associations in the reader's mind, and out of the mix, meaning is created" (p. 1). Patesan et al. (2014) suggested, "An active reader always does something: predicts, makes inferences and draws conclusions, compares and contrasts. He also evaluates or makes decisions" (p. 64). In addition, these same authors asserted, "Active, purposeful reading leads to true meaningful learning" (p. 64). The researchers put strategies in place to prepare students for an exit exam they needed to complete in the military to graduate. The test demanded close reading of texts, and claimed practice in class would lead to students getting higher scores. The strategies included "skimming . . . scanning, [and] detailed reading" (p. 65). Holdren (2012)

explored students reading within a broader context and found visual arts led to critical thinking improvement. Holden claimed, "Using visual arts projects as assessments for higher level reading comprehension skills can offer an alternative that accommodates a variety of working styles and engages students in critical thinking skills" (p. 692).

One research question, noted in the previously mentioned study, was "How can visual arts projects demonstrate higher level reading comprehension skills?" (Holdren, 2012, p. 695) and aimed at the researcher determining whether an alternative way of viewing reading could enhance critical thinking. The study included 11th grade English students in a rural community with students who had completed literature studies of four classic novels. Students selected among "painting, drawing, sculpture, and photography, to demonstrate their understanding of concepts in the novels they read and discussed" (p. 694). The results showed, "of the 21 students . . . 14 produced work . . . demonstrat[ing] connections beyond the illustrative, and 10 . . . established metaphorical connections, or synthesized details . . . that required a clear understanding of thematic concepts..." (p. 695). Leland, Ociepka, and Kuonen (2012) "investigated how experiences with different interpretive stances might support [students] in becoming more critical readers" (p. 429) among a group of low socio economic eighth grade magnet school. The researchers "major goals [aimed] to increase students' capacity for collaborative problem solving and decision making" (p. 430). The research procedure included the use of a picture book, and a student examination of the book through Birch's (1988) "interpretative stance explanations: metaphorical . . . philosophical . . . aesthetic . . . analytical . . . intertextual . . . [and] critical" (as cited in Leland, Ociepka, & Kuonen., 012, p. 430). Leland et al. (2012) concluded "many students demonstrated an understanding of all the different

perspectives, including critical stance" (p. 431). The same researchers found "reading from different stances encouraged students to engage in flexible thinking and to see multiple perspectives" (p. 436).

Gradual Release of Responsibility and Critical Thinking

Hillocks (2011) emphasized the importance of the teachers' role in challenging the learners in the classroom and claimed, "When learners reach a level of proficiency, it's time to increase the difficulty of the work and provide less support" (p. 30). Researchers and educational theorists claimed when teachers structured lessons, which included modeling, collaboration, and independence, students would have a greater propensity for problem solving and critical thinking (Pearson & Gallagher, 1983; Vygotsky, 1978). A researcher claimed the

> zone of proximal development: . . . [the] distance between the actual developmental level as determined by independent problem solving and the level of potential developments as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978, p. 33)

Students learned at a higher level when this process allowed for "what is in the course of maturing" (p. 33). Pearson and Gallagher (1983) summarized the teacher first creates the design, shows the students the process with examples, has them try the methodology with their teacher and/or peers, and then ultimately

> what [comes] in between these two extremes [is] the gradual release of responsibility [GRR] from teacher to student [and] "every student gets to the point . . . to accept total responsibility for the task, including the responsibility for

> determining [how to] apply . . . the strategy appropriately (i.e., self-monitoring) (p. 338).

The goal: "planned obsolescent' on the part of the teacher" (p. 338). Vacca and Vacca (1999) stated "In a nutshell, instructional scaffolding allows teachers to support readers' efforts to make sense of texts while showing them how to use strategies that will, over time, lead to independent learning" (p. 24).

Researchers at various grade levels found the GRR method led to higher order thinking (Afshar, Rahimi, & Rahimi, 2014; Choo, & Paull, 2013; Lloyd, 2004; Wagner & Morgan, 2014). In the role of a reading specialist, Lloyd (2004) collaborated with a sixth grade teacher who had a diverse suburban classroom with students from other countries, many of whom "spoke their native languages at home" (p. 116). The researchers noted most students did not make self- inquiries when they encountered texts, and even those who did question seemed unclear how to use this metacognitive "strategy as a tool for . . . comprehension of different genres" (Lloyd, 2004, p. 116); therefore, they selected how to question and "prompt a real conversation with text" (p. 115) as their focus in the classroom. First, the lesson involved a read aloud, then guided reading with think aloud questions and independently prepped for Literature Circles, a concept Daniels (2002) summarized as when "students could pick their own books, form small groups, and meet regularly to share ideas, feelings, questions, connections, and judgments about books they had read" (p. 7). Lloyd (2004) recognized "Students in all groups reflected later on their discovery that a reader's questions promote active reading" (p.121).

Choo and Paull (2013) both who taught at the college level, also observed how GRR positively altered student learning. Using the term "planned obsolescence" (as

cited in Pearson & Gallagher, 1983, p. 338) students took control of their own leaning and the teacher faded out of the learning process and "determin[ed] whether or not the desired strategy [was] being applied appropriately" (p. 292). Choo and Paull observed students did not necessarily understand all of the parameters of plagiarism (2013) and claimed "through education, staff will gradually relinquish their position of greater power, and students will be endowed with increasing responsibility and accountability; convergence will eventually result" (p. 292). Students would understand and avoid plagiarism with this applied methodology. Initially,

> students [engage] in . . . lessons [with] desired outcomes; second . . . are led through tasks designed to increase understanding of plagiarism; third . . . students practice the requisite skills, apply them and interact with . . . peers; and . . . finally . . . information is synthesized and applied. (p. 294)

Choo and Paull (2013) concluded this process worked for students to have a deeper understanding and application of plagiarism, which had multiple components.

Afshar, Rahimi, and Rahimi (2014) found success with the GRR model after conducting research with one hundred English Foreign Language Iranian undergraduate learners in a university setting. Part of their methodology included "Critical thinking, motivation assessments, and autonomy questionnaires" (para. 26). Afshar et al. (2014) concurred with Barzdžiukienė, Urbonienė, and Klimovienės' (2006) findings: "Students became better in making critique, developing own position and making [a] decision because both critical and creative thinking have been applied in the process of teaching" (p. 81) in a university setting. Afshar et al. (2014) concluded, "The results suggested positive relationships among the independent variables (i.e. critical thinking, instrumental

motivation, and autonomy) and the dependent variable (i.e. academic achievement)" (para. 32). Therefore, the researcher believed students' critical thinking progressed when a scaffold approach occurred and they learned to think independently and take ownership for their own learning.

Wagner and Morgan (2014) used the GRR technique combined with Knobel and Lankshear's (2008) concept of Remix to "take cultural artifacts and combine and manipulate them into new kinds of creative blends" (p. 22). In the Wagner and Morgan (2014) study, which include[ed] three English freshman classes with various abilities and backgrounds, the literacy professor and English teacher used the remix concept referred to as " show[ing] meaning in a new way by putting a twist on something familiar" (p. 10) and used this concept of "tak[ing] a previous medium as a source material, manipulate[ing] it through adapting the material for a new message or purpose, and then display[ing] that new message for a new audience" (p. 12). Teachers used direct instruction and modeled, guided the creation process, and ultimately gave students autonomy with scheduling, presentation format, and to determine the overall purpose. What the English teacher "found in the stack of remixes was simple: the students . . . show[ed] their understanding of theme, characterization and symbols, but a true depth of understanding to the point that they could manipulate them enough to alter the intended message" (p. 14).

Teaching Reading Strategies and Critical Thinking

Serravallo (2015) stated, "Effective reading strategies are like my favorite recipes; they teach you how to accomplish something that is not yet automatic in a broken down, step-by-step manner" (p. 8). Furthermore, Vacca and Vacca (1999) suggested value in

teaching strategies and suggested teachers "are shying away from traditional approaches in favor of strategies that reach diverse learners in ways that support literacy and learning in content area classrooms" (p. 30). Teachers and educational theorists claimed a relationship exists between reading comprehension and critical thinking, and one way in which teachers develop critical thinking is incorporating teaching reading strategies into their classroom lessons and having students practice these strategies (Aloqaili, 2012; Gelder, 2005; Harvey & Goudvis, 2013; Patesan, Balagiu, Zechia, & Alibec, 2014; Peterson, & Taylor, 2012; Serravallo, 2015). Comprehension stems from the innate human condition and directly relates to thinking because "it is their DNA to think . . . and pop out of the womb thinking" (Harvey & Goudvis, 2013, p. 432), which contradicts an alternative viewpoint that a person solely learns comprehension by instruction. Harvey and Goudivis (2013) reflected on how children developed and viewed the world around them. The authors argued interaction and responses to their environment prove an innate ability to comprehend; however, educators needed to "teach them about their thinking" (p. 432). These researchers also emphasized the need to instruct them to "be aware of their thinking, think strategically, and recognize the power of their own thinking" (p. 432). Teachers who model metacognition, teach specific strategies with reading, and have students internalize their own "power to turn information into knowledge by . . . questioning an author's purpose, drawing inferences about characters' actions and words to surface claims in literature, or synthesizing information to build knowledge across several texts" (p. 433) enhance comprehension. Harvey and Goudivis (2013) claimed 20 years of elementary teaching experience reinforced their belief, "Reading, writing, and thinking across disciplines promotes literacy" (pp. 438-439). Vacca and Vacca (1999)

reaffirmed the importance of metacognition for students when they asserted, "Metacognitive classrooms are places where students learn how to learn" (p. 79); therefore, if the students internalized this process, "Students will be more aware of, confident in, and competent in their use of learning strategies" (p. 79).

In an academic and philosophical study, Aloqaili (2012) claimed an interconnection existed between "reading comprehension and critical thinking" (p. 35) and compiled research that led to defining reading comprehension as "meaning constructed as a result of . . . complex and interactive processes relating a reader's critical thinking, prior knowledge, and inference-making" (p. 36). This theoretical base included the concept schemes: "extensive representations of more general patterns or regularities that occur in our experience" (Smith, 1988, p. 14). Aloqaili (2012) concluded the review of the literature showed "a strong relationship among reading comprehension, critical thinking and prior knowledge" (p. 29) and "reading comprehension develops by utilizing the connections between reading comprehension and critical thinking" (p. 39). Therefore, since this relationship exists, the researcher concluded that helping students build prior knowledge through reading leads to critical thinking progression.

Several studies claimed teachers should directly teach reading strategies (Closs, 2006; McNamara, 2009; Patesan et al., 2014; Serravallo, 2015). Patesan et al. (2014) concluded the following: to equip students to take the rigorous military exams that contained challenging reading, teachers need to prepare students. As a result of strengthening students' reading skills, students take ownership and reading success happens when students internalize "how to adjust reading strategies for different texts and circumstances, understand difficult and unfamiliar syntax, recognize how discourse

varies from topic to topic, [and] depict the allusions and cultural references of a text" (p. 65). The teachers created goals based on the observation that "active, purposeful reading leads to . . . meaningful learning. Reading is a core skill for study . . . students should get familiar with . . . strategies that help them read effectively, at a quick pace [to] get . . . maximum benefits with reasonable time to spend . . . [on] task" (p. 64). The researchers used various reading strategies, such as questioning the text, "outlining . . . skimming . . . scanning . . . anticipatory questions" (p. 64) and examining text features, among others. Patesan et al. (2014) noted,

> The final goal is to teach them how to adjust reading strategies for different texts and circumstances, understand difficult and unfamiliar syntax, recognize how discourse varies . . . [and] depict . . . allusions and cultural references of a text. (p. 65)

Therefore, educators inferred that teaching reading strategies potentially lead to a two-fold positive effect: maximizing reading effectiveness and preparing students to transfer these skills into the workforce. McNamara (2009) indicated the SERT strategy method Serravallo (2015) noted,

> "The most effective way to work on a goal . . . is to introduce one strategy . . . guide the student in practicing the strategy, and move on to a new strategy when the student appears to be secure with the first one. (p. 9)

Miller and Veatch (2010) noted, however, that with one of the researcher's group of sixth graders, in addition to vocabulary, comprehension, motivation, and fluency practice (p. 155), students benefited from learning various strategies based on their needs versus the teacher pre selecting the strategies. "Rather than looking for a single best instructional

practice . . . [the teacher uses thoughtful decisions based on the students and the curriculum" (Miller & Veatch, 2010, p. 164). For struggling readers, McNamara (2009) argued, "Regardless of the locus of the reading problems, teaching strategies are one of the most effective means of helping students to overcome them (p. 34). Closs (2006) concurred with a study that found "by using multiple reading comprehension strategies, four out of the five [at risk second grade] students were on grade level by the end of the study" (p. 6).

Peterson and Taylor (2012) examined instructional practices of second and third grade teachers in a school district not meeting the state standards for yearly progress, and found when teachers changed their questioning practices, students' reading showed improvement. The classroom teachers saw "higher order questioning requires students to think at a deeper level and to elaborate on their oral and written responses to literature" (p. 297). Instead of teaching students to ask literal text-based questions, students modeled open-ended questions using words like 'describe' and 'why.' For example, the teacher asked, "Please tell me more about that" (p. 297). In this GRR model, the next step involved students generating their own questions. Participant's responses indicated an understanding of the concept; one example from a student-generated question was "Do you have evidence from the story to support that [statement]?" (p. 299). The teachers reported their students "did a lot of thinking, questioning, and making connections" (p. 304).

Most educators believe critical thinking serves as the cornerstone goal for learners (Gelder, 2005; Lai, 2011; Shapiro & Gross, 2013). Gelder (2005) suggested, "Almost everyone agrees that one of the main goals of education, at whatever level, is to help

develop general thinking skills, particularly critical-thinking skills" (p. 41). Shapriro and Gross (2013) concurred a university's goal should be "to promote critical thinking in their graduate students, so they [can] become more effective leaders" (p. 95). Gelder (2005) claimed the cognitive science discipline gave some insight into the components of critical thinking, how it may develop, and what educators do to enhance its progress. The first point revolved around schema and people storing information into compartments that do not necessarily lead to providing evidence to support an abstract concept if it does not align or fit into a category; "because critical thinking is so difficult, it takes a long time to become good at it" (p. 42).

The second point from cognitive science suggested, "For students to improve, they must engage in critical thinking itself. It is not enough to learn about critical thinking" (p. 43), which means students need to practice, and this process is unnatural. Cognitive science research did not suggest this practice happens in isolation, but through this type of example:

> students practice a primary critical-thinking skill, such as assessing . . . credibility of authors of letters. The next point is get them to abstract for themselves, [and] . . . challenge them to identify some other context . . . in which that abstracted skill might be . . . applied, and then apply it. (p. 43)

The fourth component from cognitive science involved learning the academic vocabulary from critical thinking: "Beyond a certain point, improvement demands acquiring some theory. The serious critical thinker understands the theory of critical thinking" (Gelder, p. 44). Gelder (2005) concluded, the fundamental component of critical thinking noted by the cognitive scientists is knowing how to construct an

argument and why. A cognitive science understanding of critical thinking implies students need to be aware of their own bigotry or blockages in thinking: "We stick with our beliefs even in the face of overwhelming contrary evidence as long as we can find at least some support, no matter how slender" (p. 46). Gelder (2005) also implied teaching students how to be aware of their biases leads to higher levels of critical thinking. Since critical thinking does not necessarily come naturally, then teachers have a positive effect in developing critical thinking if they apply what they learn from cognitive scientists. Lai (2011) concurred with Gelder's (2005) point about the importance of critical thinking:

> Educators have long [seen] the importance of critical thinking . . . as an outcome of student learning. [T]he Partnership for 21st Century Skills has identified critical thinking as one of several . . . skills . . . students [need] for post-secondary education and the workforce. (p. 4)

Golden, Berquist, Coleman, and Sproule (2003) suggested one strategy that represents thinking and logic that stems from Toulmin (as cited in Golden, Berquist, Coleman, and Sproule, 2003) who claimed, "to show argument is a way of knowing" (p. 317) and "argument is the primary force responsible for conceptual change or the generation of new knowledge" (p. 317). Hillocks (2011) concurred that learning how to construct arguments is essential;

> students [need] to write strong arguments [and] . . . evaluate the arguments of others . . . a skill critical to participating in a democratic society" (p. xv-xvi). The researcher extended the point with the argument that "Toulmin's basic conception of argument . . . [includes] a claim . . . based on evidence of some sort; a warrant that explains how the evidence supports the claim; backing supporting the

> warrants; and qualifications and rebuttals or counter arguments that refute competing claims. (p. xix)

Beers and Probst (2013) supported the necessity of deep analysis, which they described as getting "inside the text, noticing everything, questioning everything, [and] weighing everything they are reading" (p. 3). Hackney (1997) interviewed Toulmin who suggested that complexity in not just assuming the argument structure contributed to meaning but stressed the importance of context, as well. In the interview, Toulmin stated there exists a "concern for the broader humane streams of understanding that we find flowing around these technical arguments and providing a context for them, providing a situation for them" (as cited in Hackney, 1997, para. 10). Other researchers concurred by conducting research showing Toulmin's model of argumentation had value for thinking and logic in assorted disciplines with varying contexts, such as literature, science, math, and intellectualism in general (Kulatunga, Moog, & Lewis, 2014; Morson, 2011; Nardi, Biza, & Zachariades, 2012; Wartofsky, 1997). Therefore, teaching this strategy required a close reading of texts, which leads to higher order thinking.

Morson (2011) suggested in a conversation with Toulmin about teaching Tolstoy's novel *Anna Karenina* and examining the characters' conversations, for example, the philosopher believed "decisions . . . depend on ethical sensitivity [and are] born of experience and reflection that yields discretion and judgment superior to what any theoretical reasoning could provide" (p. 214). This statement suggests the context, historical and/or experiential, plays a part in the argument versus merely examination of the structure itself.

In a science context, Kulatunga, Moog, and Lewis (2014) argued the key components of Toulmin's theory: "claim, data, and warrant" (p. 82) and "the use of prompts frequently led to higher level arguments" (p. 83). The researchers also noted "Toulmin's Argumentation Scheme is a useful tool for examining and analyzing student discourse in group settings, the level of argumentation produced by that discourse, and the relationship between that discourse and the structure of the written activities" (p. 83). In a study with mathematics, teachers using an adapted Toulmin approach, Nardi, Biza, and Zachariades (2012) "explore[d] and discuss[ed] the range of influences on teachers' views and actions" (p. 169). The researchers also "argue[d] that uses of Toulmin's model in mathematics education contexts must acknowledge the broader warrants that teachers employ when they determine and justify their actions" (p. 161). Nardi et al. (2012) concluded, teachers' influences consist of "epistemological, pedagogical a priori warrants; professional and personal empirical warrants; epistemological and curricular institutional warrants; and evaluative warrants" (p. 169). The argument structures have essential contextual components. Wartofsky (1997) summarized in an intellectual sense, "Toulmin insists that we need to situate a work or a practice in its context in order to understand it" (para. 9). Implications for a reading class teacher suggest students need to read a variety of texts and in multiple contexts, but "not to abandon sweet, pure reason" (para. 20). Wartofshy (1997) wrote,

> What's asked for is a more open appreciation of the uses of reason and of argument, a less authoritarian insistence on the hegemony of one form of rationality over all others, and a proper valuation of the complexity and many-sidedness of life, which occupies us with considerations of the practical, the

> prudential, the questions of right and wrong, better and worse, health and illness--all of which require of us that we be responsible to think things through, that we give good reasons for our choices, or at least try to do so. (para. 20)

Smith (1988) argued, "Reading and thinking are fundamentally inseparable, especially when reading is discussed or researched under the heading of comprehension" (p. 281). Therefore, teaching students to comprehend what they read is interrelated to how they think. "The theory of the world is the source of comprehension, as the brain continually generates and examines possibilities about situations in real and imaginary worlds" (p. 22). The ultimate level of critical thinking stems from "metacognition, or 'thinking about thinking' . . . ; [it] is not a special set of skills but the constant activity of the brain, subject only to constraints of individual prior knowledge, disposition, and authority" (p. 22). This evidence suggests to the researcher that building prior knowledge in the classroom helps develop critical thinking.

Establishing a Reading Community and Critical Thinking

Bloome, Katz, Wilson-Keenan, and Solsken (2000) viewed "reading and writing as social and cultural practices" (p. 161) versus an isolated experience. Building a community of readers enhances critical thinking and works as a way to build a democratic classroom (Katzev, Allen, & Peters, 2009; Marri, 2009; Wilbur & Scott, 2013). Katzev et al. (2009) "examined the effects of a college-level course in the humanities . . . [with] economically and educationally disadvantaged individuals in a group of incarcerated inmates at Eastern Oregon Correctional Institution" (p. 1976). The course goal sought

> to provide . . . knowledge and intellectual skills that . . . foster significant changes in the lives of participants [and] prepare them for fuller participation in their current and — in the case of . . . inmates — eventual civic, economic, and political lives. (p. 1977)

Each group read from various pre-selected classic literature and explored "some of the fundamental questions of human existence" (p. 1977). The conclusion from the data showed, "The experience of reading and discussing some of the great works of literature, history, and philosophy . . . foster[ed] a number of significant changes in the lives of the students" (p. 1983). With the college students, the data reflected their ability "to think more clearly and with greater insight . . . greater confidence in their verbal ability and improved skill in thinking more critically about these issues" (p. 1985). In relation to the classroom community, the students indicated, "class discussions played a major role in contributing to the impact of the program (p. 1985). The inmates "also reported a change in their critical thinking skills" (p. 1978).

Marri (2009) "examine[d] how a secondary social studies teacher used curriculum and pedagogy to help racially/ethnically diverse students from low socioeconomic backgrounds build community to become active citizens with the capacity for democratic living" (p. 12). The teacher "created a comfortable classroom environment [with] a . . . strong sense of community [and] used activities and discussions that helped students see each other as individuals, rather than representatives of larger groups, with the goal of understanding each other" (p. 16). The study concluded that although challenging, with "implementing multicultural democratic education [within] critical pedagogy, building of

community, and transformative disciplinary content and skills . . . [the researcher] accomplish[ed] this goal" (p. 17).

Wilbur and Scott (2013) studied how a "university classroom . . . focuse[d] on power, democracy, and human agency" (p. 158) to change the culture. Within an interdisciplinary classroom, freshmen from various demographics read texts about power within the field of education (p. 159). With a variety of medians and methods, students engaged in discourse, and the researchers used their "learning community as a laboratory to reveal and apply the course concepts in practice" (p. 159). The researchers concluded, "Through class discussions that were comfortable and challenging, we . . . examine ourselves using different metaphors and images, while seeing the power dynamic in our class similarly" (p. 161). The "teaching–learning partnership . . . [between researchers and students, led to], critical inquiry" (p. 163).

A classroom community enhances learning, critical thinking and prepares students to collaborate, a skill necessary for the 21srt century work place (Friedman & Mandelbaum, 2011; Puro & Bloome, 1987; Wagner, 2011). Researchers Puro and Bloome (1987) viewed classroom learning as "occur[ing] through and is embedded in the interpersonal communication between teacher and students and between students. As teachers and students interact, they construct a communicative context against which each others' acts and utterances are interpreted" (p. 29); therefore, learning occurs within the context of the community.

Wagner (2011) emphasized to prepare students for the 21st century, teachers need to "develop strategies for teaching and assessing three C's: critical and creative thinking, communication, and collaboration in every class". Friedman and Mendelbaum (2011)

argued the global community consists of a "hyper-connected world" (p. 142), and "the merger of globalization and the IT revolution" meant people have to collaborate among individuals in other countries as well as within other geographical areas of their own countries. Blair (2009) examined a music classroom and argued, "The role of the teacher . . . is to design ways for students to be the center of classroom activity, interacting with the music and with each other" (para. 10). The study involved examining students "solving musical problems" (para. 5); " . . . older students are creating a "remix" (para. 6) where students blend various forms of music for a new audience. Building this community of learners depends on the teacher setting up the structure of collaborative learning.

Blogs, Learning, and Critical Thinking

Blogs enhance critical thinking, build community, and promote a democracy in a 21st century learning environment (Boling, Castek, Zawilinski, Barton & Nierlich, 2008; Churchill, 2011; Gordon, 2013; Hanson, 2011; Shih-Hsien, 2009; Young, Heo, & Lee, 2011). In all content area classes where students read, according to Vacca and Vacca (1999), "The two processes [reading and writing], both rooted in language, are intertwined and share common cognitive and sociocultural characteristics" (p. 307). Boling, Castek, Zawilinski, Barton & Nierlich (2008) summarized the unique characteristic of blogs that distinguish them from other types of websites. The researchers noted, "Unlike traditional websites, however, they provide a space where people can post comments and engage in online conversations" (p. 504).

Woodly (2008) argued, blogs have a value for the reader as well as for the writer: "Blogs offer information that is distinct in its form and content, offering readers a

democratic experience that cannot be offered by any traditional form" (pp. 113-114). Boling et al. (2008) offered two narrative overviews of blogs in a classroom setting. In one third-grade classroom, the teacher elicited comments on topics, such as "endangered wildlife [and] teasing" (p. 504). Another teacher created a blog to "engage her fourth-grade readers . . . in online literature discussions [and] creative writing" (p. 504). One teacher said the purpose of creating blog assignments was "so that 'young writers and voices can connect with news stories about their communities, their schools, and their interests'" (p. 505). Boling et al. (2008) expanded the lessons and added complexity and engaged several schools in a blog project that included "a fifth-grade class in Connecticut, a fourth-and fifth grade combination class in California, and two online reading comprehension researchers" (p. 506). The national parks lesson showed that "writing for an audience of their peers motivated both classes to extensively revise and edit" (p. 506) versus using the traditional methods of sharing in the classroom setting.

Researchers found value in using blogs in the graduate and undergraduate classrooms enhanced critical thinking and communication (Churchill, 2011; Dos & Demir, 2013; Hanson, 2011; Lowman, Judge, & Wiss, 2010; Shih-Hsien, 2009). At the University of Hong Kong, researchers aimed to "explore the educational applications of blogs in the single case of a class of postgraduate students over the period of one semester" (Churchill, 2011, p. 151). The study focused on 26 "experienced primary or secondary teachers" (p. 151). The assignments included the students participating in "accessing course material, posting reflections, featuring artifacts created through the learning tasks, commenting on each other's contributions, and otherwise participating on a regular basis throughout the semester" (p. 151). The researchers concluded, "Blogging

technology adds a new dimension to teachers' effectiveness by enabling them to do things to supplement classroom teaching and learning that are not possible otherwise" (p. 155). Hanson (2011) developed a project that included blogs for a dental hygiene course to prepare students for a national examination (p. 6). In the assignments, "students engaged in conversations via blogs, which was meant to stimulate thinking and discussion on topics related to community oral health" (p. 8). At the end of the course, the researcher concluded the "use of technologies, such as the Internet and blogging, are a way to support peer-to-peer learning and foster critical discussion" (p. 11).

Blogs served as a communication vehicle and also as a necessity within the cyber-connected classroom (Namwar & Rastgoo, 2014; Shih-Hsien 2009). Namwar and Rastgoo (2014) argued, "Students in higher education are not dependent [on a] classroom. . . . They have to work . . . cooperatively [and] in the conventional classroom doing this is very hard, but in new age and by using new technologies such as weblog doing this" (p. 179) results in a more effective communication within a larger setting. An example of this exigency occurred when teachers and students needed a forum to share ideas. Shih-Hsien (2009) examined a study that involved using blogs with "43 [English as a Foreign Language] EFL student teachers in two teacher training programs at two science and technology institutions in central Taiwan" (p. 14). "The instructors created a blog to be able to communicate with all 43 student teachers" with topics that reflected "theories of teaching, instructional approaches and methods used, teaching evaluation methods and criteria, self-awareness, [and] questions about teaching and requests for advice" (p. 15). The teachers' roles included "go[ing] online and read[ing] . . . reflections [and] challeng[ing] student[s'] thinking by posting questions and asking for further

reflection in order to raise participants' critical reflection" (pp. 16-17). The study showed "20 . . . teachers reported that due to such challenges set by the instructors their thinking went deeper and became more critical" (p. 17). Students reported, "by using blogs as a platform for reflection, participants got more opportunities to make comments and challenge each other's viewpoints" (p. 18). The critical thinking aspect resulted in "learners generat[ing] more inquiries that would take their conceptions further" (p. 19).

Examining reflection in conjunction with blogs in an undergraduate classroom revealed evidence of critical thinking. According to Dos and Demir (2013), blog reflections "could be used as a learning instrument. In most cases the students reflected their development in the blogs" (p. 1342). Lowman, Judge, and Wiss (2010) claimed in an undergraduate class, students engaged in "The Lurking Assignment [which] aim[ed] to give students electronic contact with a variety of individuals showing the kinds of disorders being studied in an abnormal psychology class" (p. 267). The students perused blogs and websites, and one significant finding showed "more than anything, students reported an increase in their appreciation of the complexity of how psychopathology affects human lives and in their empathy for affected individuals" (p. 269).

Blogs promoted critical thinking for adult learners (Gyeong Mi & Romee, 2013; Young et al., 2011) and "[b]logs [can serve] as a meaningful environment for informal adult learning" (Young et al., 2011, p. 149). Among various demographics, bloggers reported, "No matter whether they recognized any changes in their life after using blogs, the majority of participants (90%) agreed that they had experienced some kind of learning through their blogging activities" (p. 155). In addition to bloggers suggesting engaging in blogs "may be useful in helping [their] knowledge acquisition and reflection

process, blogging [is] a significant factor in making informal learning more enriching and fulfilling" (p. 159). Gyeong Mi and Romee (2013) studied informal learning with adults and examined blogs as one of their focused areas. They concluded, "Most of the bloggers (90.0 %) responded that they had experienced some kind of learning through their blogging activities, implying that the bloggers experienced learning even when they did not intend to learn through blogging" (p. 138).

Blogs advanced critical thinking in high school settings (Chandler-Olcott, 2013; West, 2008). In a previously mentioned study, Chandler-Olcott (2013) examined how high school teachers used blogging as a way for students to process various perspectives about the Boston City bombings. The teachers asked a rhetorical question after examining their students' postings: "Whose responsibility is it to teach our students to be engaged, critical and respectful readers and writers in the online media sphere?" (p. 287).

West (2008) investigated "the nature of literary response as communicated via weblog" (pp. 588-589). The research showed three different "socially situated identities that distinguish[ed] each participant from the others" (p. 580). At the end of the year, the teacher and students "knew more about the thinking and reading process[es] of one another, from reading the blogs" (p. 587). The students' critical thinking reflected in the way they "talk[ed] back to characters, reframe[d] events according to their discourses they're familiar with, and express[ed] resistance to the prescribed curriculum in ways that they couldn't or wouldn't within the bounds of the classroom" (p. 587). In this study, West (2008) revealed thinking develops when the boundaries of the classroom environment expanded.

However, researchers noted areas of caution when examining the authenticity of blogs (Gordon, 2013: Lowman et al., 2010). Gordon (2013) argued, "Freedom of expression plays an important role on both individual and public levels. It supports individual dignity and self-actualization and at the same time enables public participation in state-related decision making" (p. 1782). Gordon touted the importance of blogs as "hav[ing] proved to be an essential tool for freedom of expression allowing millions of people around the world to express themselves and communicate" (p. 1783). The author asserted, "The law protects bloggers in the same way as journalists when it comes to attacks aimed at silencing those exercising their right to freedom of expression" (p. 1785). The caution, however, is within the anonymity of blogging; this freedom of expression should not encroach on others' rights. Gordon (2013) concluded that although this open forum has advantages for civil discourse, parameters should be developed. Similarly, Lowman et al. (2010) found that after perusing websites and blogs about abnormal psychology, students in a psychology class "expressed shock at [finding] posts that praised self-starvation on the pro-anorexia sites and those that celebrated drunkenness on the pro drinking sites" (p. 269); therefore, analyzing and deciphering how to access credible sites became part of the learning experience.

In general, however, authentic writing for specific purposes and audiences authenticates the writing experience by creating purpose (Peterson, 2014; Wiggins, 2009). Since blogs have an expanded audience, Wiggins' (2009) statement "The point of writing is to have something to say and to make a difference in saying it" (p. 29) implied to make a difference, an audience who reads or listens becomes paramount. Wiggins (2009) additionally claimed, "Real writers are trying to make a difference, find their true

audience, and cause some result in that leadership" (p. 30). Similarly, Peterson (2014) reaffirmed these ideas in the claim, "Classroom writing should be created with the expectation that it will have an impact on readers" (pp. 498-499).

Choice and Critical Thinking

Building choice into the classroom setting, researchers concluded, leads to the recursive nature and development of interest, motivation, reading, and critical thinking (Fair & Combs, 2011; Francois, 2013; Irvin, Meltzer & Dukes, 2007; Kittle, 2013; Morgan & Wagner, 2013; Patall, 2013; Zambo, 2009); however, Patall (2013) noted "The opportunity to choose aspects of a task may be most beneficial when the individual feels some initial interest for the activity . . . or when the task . . . can benefit from opportunities to build interest" (p. 531). Robinson (2014) noted, "Decades of research show the connection between reading engagement and reading achievement, but we still worry about whether we should devote the time to 'free reading'" (p. 6). An effective strategy for reading intervention, Reed, Wexler, and Vaughn (2012) claimed the teacher needed to "provide interesting texts to read, as well as choices among texts" (p. 109). Kittle (2103) concurred to engage readers [teachers] "need a wide mix of texts at different ability levels that are inviting, intoxicating, and available" (p. 48). Guthrie, Klauda, and Ho (2013) concluded motivation has an impact on achievement, while Beers and Probst (2013) defended the importance of rigor; however, "The essential element in rigor is engagement" (p. 22).

In two studies involving, middle and high school students, Francois (2013), and Morgan and Wagner (2013) connected student interest and motivation to critical thinking. Francois (2013) argued the need for an investigation since "little is known about how

adolescents make meaning of these practices" (p. 141). The study sought to examine "adolescents' experiences with and attitudes toward reading in school, using sociocultural perspectives on literacy" (p. 142) within a population that "research has often designated . . . as 'struggling reader[s]' who have difficulty achieving proficiency in school literacy tasks" (142). Students selected books "that allowed them to connect characters' experiences to their real lives or to the experiences of other youths they knew" (p. 146). One student "reported his enthusiasm for the texts he read aided his comprehension and his ability to infer character traits and choices" (p. 147), which reflected research by Elder and Paul (2002), who asserted "parts of thinking or elements of reasoning [include] inference" (p. 34). These researchers defined inference as "a step of the mind, an intellectual act, by which one concludes that something is true in light of something else's being true, or seeming to be true" (p. 34). Thus, in Francois's (2013) study, the student engaged in critical thinking by selecting choice texts, which in turn provided interest and led to critical thinking through inference. In the second study, Morgan and Wagner (2013) investigated, "What would it take to help bring students back to the reward of reading for reading's sake?" (p. 659). The researchers examined how "a high school teacher, implemented a three-week choice reading unit with his sophomores to address this problem" (p. 659). The assignments included each student journaling about literary techniques and included higher order thinking, such as "how the author's use of words that have a darker connotation gave the reader a hint there had been a shift in the narrator's disposition" (pp. 662-663). Results noted: the teacher "witnessed students becoming more engaged with their reading" (p. 666) and "overall, Chris's students read

81 books, with 22 of his 51 students reading more than one book during the unit" (p. 664).

Zambo (2009) studied how "visual literacy promote[s] critical thinking (p. 60) and choice becomes how each image requires viewers to put themselves inside the scene" (p. 62). These personal examinations or choice led the researcher to conclude, "Learning visual literacy in a classroom without transferring it outside of . . . context does little to help students succeed" (p. 67). Irvin, Meltzer and Dukes (2007) stressed how the importance of "understanding adolescents' needs for choice, autonomy, purpose, voice, competence, encouragement, and acceptance can provide insight into some of the conditions needed to get students involved with academic literacy tasks" (para. 20). Consequently, when students select their own reading materials, not only their interests develop, but also their skills. Researchers Fair and Combs (2011) asserted, "As children [move into the upper grades and] improve their decoding skills, they need opportunities to practice more rapid and fluent independent silent reading" (p. 225). Educators, therefore, need to allow time and encourage students to get engrossed with books of their own choosing for skill building and critical thinking. Reading theorist Kittle (2013) stated emphatically that "teenagers want to read, -if we let them . . . and . . . determined nonreaders become committed, passionate readers given the right books, time to read, and regular responses to their thinking" (p. 1); however, "students need guidance to choose well and develop sustained . . . engagement" (p. 19).

However, even though Patall (2013) supported choice and learning, the researcher qualified the importance of choice with the argument, "It seems reasonable to expect that the initial level of interest that an individual brings to a task is likely to influence how

choice is experienced" (p. 522). After examining interest and choice with "a series of three experimental studies . . . in which interest was either measured and/or manipulated in the context of the provision of choice" (p. 524) and analyzing "how interest influences preferences for making choices and the [positive] effect of providing choice on motivation and performance" (pp. 522-523); the researchers concluded that a positive relationship occurs among choice, motivation, and performance; however, the individual's attitude toward the subject makes the most difference in students desire to learn. Within this research, several studies with college students and working adults showed, "The opportunity to choose aspects of a task may be most beneficial when the individual feels some initial interest for the activity at hand or when the task is such that it can benefit from opportunities to build interest" (p. 531). Similarly, Guthrie, Klauda, and Ho (2013) concurred, "The indirect effects of motivation on achievement are more important than the direct effects [and] . . . motivations would be associated with achievement only by pathways through engagement" (p. 12). English Language Arts students indicated, "improved engagement . . . achievement, [and] motivation are reasonable goals for instruction methods that incorporate explicit, multiple supports for strengthening student motivation" (p. 24).

Intertextuality and Critical Thinking

Bloome and Egan-Robertson (1993) argued intertextuality meant to "juxtapose different texts" together (p. 305). Intertextuality enhanced critical thinking and reflected the fluidity of influences individuals have when they created meaning as they navigated through multiple texts (Bloome & Hong, 2012; D'Angelo, 2010; Armstrong & Newman, 2011; Elkad-Lehman & Greensfeld, 2011; Kalua, 2012). Elkad-Lehman and Greensfeld

(2011) argued in their study that "intertextuality as a cultural concept is especially suited to research that stresses the subjective, relative and in constant elements of knowledge" (p. 259) and served as a "methodological concept to aid the qualitative researcher in analyzing and interpreting narratives or other texts" (p. 259). In a specific connection to reading, the researchers noted, "Intertextual reading can thus contribute perception and depth to the understanding of texts and aid in the hermeneutic process of qualitative research" (p. 259).

Armstrong and Newman (2011) examined how in two college settings, students applied "intertextuality in developmental reading courses" (p. 12). In this context, students used intertextuality as an expansion to their course material and "involve[d] an analogical process of simultaneously building—and immediately applying—schemata that are introduced by supplemental texts" (p. 9). The researchers discovered the value in students recognizing their need for supplemental texts when researching and deep thinking. With this awareness, Armstrong and Newman (2011) learned "intertextuality is a pedagogical approach to college reading that allows students to recognize when they might need additional information in order to have a richer conversation with a given text" (p. 17). Similarly, D'Angelo (2010) reaffirmed "every text is in a dialogical relationship with other texts . . . [and] intertextuality describes the relationships that exist between and among texts" (p. 33). D'Angelo (2010) argued, "The rhetoric of intertextualty . . . enable teachers and students, in their roles as rhetorical critics, to understand new strategies for producing discourse and give them alternative ways of thinking" (p. 43). This complexity of reforming and reconstructing has implications for students developing critical thinking as they pulled texts and pieces of texts together.

Extending this concept of intertextuality from rhetorical discourse and critical thinking to reading, Bloome and Hong (2013) stressed, "what counts as a juxtaposition of texts requires consideration of explicit and implicit intertextual references and signs, relationships among texts at multiple levels" (p. 4). However, Bråten, Anmarkrud, Brandmo, and Strømso (2014) cautioned the task of engaging in this interplay became challenging (p. 21). When students encounter texts, they adhere to the concept that instead of "view[ing] a text as having a meaning warranted by the content and structure of its propositions (its text base), the concept of intertextuality frames meaning as deriving from the interplay of a text with other texts" (p. 4). Students, therefore, who engage in this type of thinking with the text, create meaning at a more complex level than may have occurred without these texts being in proximity to each other.

When younger middle class third graders in a public school engaged and made meaning from multiple texts, Serafini (2015) argued, "Some connections were made intratextually (within one picture book), and some were made intertextually (between picture books)" (p. 124). The study showed "students' interpretations drew upon author's intentions, intertextual and intervisual connections, [and] visual and symbolic representations during their discussion to try and make sense of the multimodal elements of contemporary and postmodern picture books" (p. 129). Intertwining texts added to their meaning making. For older students, Bråten et al. (2014) claimed the intertextuality process may not occur effortlessly, and their study focused on the intricacy of examining and connecting multiple texts. Results showed

> comprehend[ing] . . . multiple conflicting texts by secondary school students is a complex task that may be facilitated . . . by [both] targeting students' effortful

> strategic processing . . . [and] systematically fostering . . . beliefs, orientations, and knowledge that may underlie adaptive multiple-text processing. (p. 21)

Writing and thinking within an intertextual context, work recursively to develop critical thinking (Coetezz, 2013; Deane, Sabatini, & Fowles, 2012; Sanchez & Lewis, 2014). According to Deane, Sabatini, and Fowles (2012), "Reading scores continue stagnating . . . which means that millions of children, adolescents, and adults have inadequate reading, writing, and likely, thinking skills" (p. 85). Yet even with this evidence, not all of the educational community embraces how these skills link. The authors claimed, "In general, the community of reading researchers tends to acknowledge that writing instruction supports reading development, but relatively few researchers cross the precipice and see them as jointly determined" (p. 85). These researchers concluded that each skill supported the other and worked together within a social context. Scaffolding

> a complex mental representation or model of a text or . . . integrat[ing] . . . several texts (and non-text) sources, and . . . integrating [them] by updating one's existing knowledge of the domain, often demands iterations of writing . . . and concomitant deliberation and reflection. (p. 98)

Again, the researchers reiterated this point of combining reading, writing, and thinking by asking a rhetorical question:

> don't . . . we . . . have . . . evidence of reading and critical thinking proficiency when a writer produces a well-constructed . . . composition that cites evidence derived from foundational texts and articulates a well-thought-out position, claim, argument, interpretation, description, or explanation. (p. 97)

In relation to writing and thinking, Sanchez and Lewis' (2014) study supported this interconnection. Both researchers reaffirmed that "positive effects related to critical thinking are encouraging as it demonstrates that pre-service teachers are being provided systematic instruction to develop their critical thinking skills over time" (p. 63). Thus, teachers may have optimized this positive effect concerning critical thinking, which had implications for the classroom instruction. Brough (2012) claimed, "Educators are becoming increasingly aware of the need to create learning environments which are genuinely democratic" (p. 345). With a plethora of viewpoints and information on the Internet, students need the skills to make connections to the bits of text and full texts they may encounter.

Assessment Programs, State Mandated Tests, and Critical Thinking

The Reading Plus online reading program aims to effectively monitor and improve students' reading comprehension (County, 2015; Reading Plus, 2014; Reutzel, Petscher, & Spichtig, 2012). According to Reading Plus (2014), this online assessment

> uses technology to . . . individualize scaffolded silent reading practice for students in grade three and higher, aims to . . . improve students' silent reading fluency, comprehension, and vocabulary, [and] adjusts . . . the content and duration of . . . activities so . . . students proceed at" (para. 2) their own rate.

According to Reading Plus (2014), the reporting agency from "What Works Clearinghouse (WWC) [met] evidence standards with reservations" (para. 2). Reading Plus (2014) additionally concluded that overall, "Reading Plus® was found to have potentially positive effects on comprehension for adolescent learners" (para. 1). Reutzel, Petscher, and Spichtig (2012) concluded, evidence "indicate guided, silent reading

intervention employing a suite of instructional elements described can offer classroom teachers a potentially useful and efficacious tool for providing struggling third-grade student effective, supplementary, guided silent reading practice at school" (p. 413). The program, therefore, works when teachers used supplemental reading and writing instruction. In addition, County (2015) conducted a program evaluation of ninth grade students who used Reading Plus with fidelity that showed "markedly improved student silent reading and comprehension rates" (p. 109) for students the district deemed "at risk" due to standardized scores.

Further studies, however, revealed alternative findings about the Reading Plus program. Several studies yielded mixed reviews on the Reading Plus Program's effectiveness for all student populations (Marrs & Patrick, 2002; Shelley-Tremblay & Eyer, 2009). According to Marrs and Patrick (2002), the Reading Plus program aimed to work on "specific skills . . . such as reading rate, comprehension . . . visual efficiency, vocabulary development, and word identification" (p. 299). These researchers conducted a study of 100 middle school students in the Midwest and included special education students, regular education students, and struggling readers (p. 302). Marrs and Patrick's (2002) study results revealed gains for regular education students; however, the special education and remedial students did not show gains in reading improvement, which the researchers attributed to the variable factors and complexities of each individual reader. Marrs and Patrick (2002) claimed

> the differing effects of the Reading Plus program on regular versus special education students suggests the possible influence of . . . intellectual ability,

> processing speed, cognitive style, and memory. Every learner has . . . strengths and weaknesses that may affect their responses. (p. 319)

In a later study, Shelley-Tremblay and Eyer (2009) claimed, "The Reading Plus (RP) program has been in existence in some form for over 30 years, and it has undergone numerous revisions and changes" (p. 59). In this study's conclusion, the authors claimed, "RP produced significantly larger gains than randomly assigned controls in comprehension and word knowledge in normally achieving 2nd grader" (p. 65); thus, this study showed with regular education students, Reading Plus "can produce substantial supplemental gains" (p. 66), which supported Marrs and Patrick's (2002) findings.

Assessments served as valuable tools to guide instruction (Dennis, 2009; Fountas & Pinnell, 2014; Heinnemann, 2015; Mellard, Woods, & Fall (2011). From their publisher's catalog, Heinemann (2015) claimed teachers gave their "Benchmark Assessment System to determine students' independent and instructional reading levels . . . to observe student reading behaviors one-on-one, engage in comprehension conversations that go beyond retelling, and make informed decisions that connect assessment to instruction" (p. 16). Researchers Fountas and Pinnell (2014) claimed by measuring "accuracy levels . . . fluency . . . oral reading behaviors . . . areas of struggles, [and] types of "error[s]" (p. 276), educators examined how students dissected and make meaning from texts and then instructed them to converse to demonstrate their understanding.

The teacher gathered data to make reading goals and plans. Fountas and Pinnell (2014) suggested a leveled assessment "provides a detailed description of . . . behaviors of proficient readers . . . evident in oral reading, in talk, and in writing about reading so

[teachers] can teach for change in reading behaviors over time" (p. 276). This approach, led

> to . . . proficient readers [who] must experience successful processing daily. Not only should they…read books independently, building interest, stamina, and fluency; they also need to tackle harder books that provide . . . opportunity to grow [into] more skillful . . . reader[s]. (Fountas & Pinnell, 2014, p. 276)

This data collection for children, however, also worked to show a picture of adults' literacy patterns, according to Mellard et al.(2011). The authors concluded collecting multiple types of data may reveal a portrait of specific reading components, and suggested teacher may assist student in reading greater competence by listening to fluency when they read aloud and look at the ration of errors. The researcher believes this close examination leads to the instructor making inferences about the readers' specific strengths and weaknesses.

Several researchers supported the claim that since reading also reflects aspects of critical thinking, rubrics and categories for analysis of data and evidence could reveal a picture to benefit instruction methodology (Dennis, 2009; Hess, 2013; Smarter Balanced Assessment Consortium, 2012a*;* Weltzer-Ward, Baltes, & Lynn, 2008). Due to lack of an online critical thinking assessment tool, researchers found a need to develop a Critical Thinking Framework (TAF), described as "a theoretically based [construct to] support assessment of process, structure, and quality at the level of an individual post or statement be extended to characterize overall discussion" (Weltzer-Ward et al., 2008, pp. 6-7). The researchers categorized the coding system into "process, structure, and quality" (p. 8) (Appendix B). The authors concluded this procedure yields "high reliability . . . in

employing the framework to answer questions about critical thinking process and quality providing information which would aid a comparison with other online discussion activities or with a similar discussion using support tools" (p. 14). These results offer teachers and students direction for specific areas of learning focus.

Hess (2013) concurred, criteria for learning, reading and critical thinking embedded within categories, produced data beneficial for both the teacher and student. The author claimed, "College and Career Readiness and CCSS demands increased academic challenge for students; however, these standards by themselves, were not enough to improve student achievement because educators needed to develop tools for application of the standards, such as "curricula and assessments" (p. 4) and methodology to engage students in academic discourse. One tool that assessed critical thinking, according to Smarter Balanced Assessment Consortium (2012b), embraced a Cognitive Rigor Matrix, which . . . delineates higher order thinking: Bloom's (revised) Taxonomy and Webb's DOK Levels. The matrix assimilated the frameworks as a method for examining instruction, for affecting teacher instruction and for assessment development. All of the previous methods served as ways to measure and guide effective instruction to develop reading and critical thinking. Dennis (2009) agreed, "we must consider the abilities with which our students enter the classroom, based on substantial data, and turn our focus to how best to build upon those abilities to provide meaningful instruction to our striving readers" (p. 290). Close observation and multiple assessment measures offer clues to this study's researcher about students in order to tailor each of their specific learning needs.

Purposeful reflection and feedback increase performance (Austin, Gregory, & Chiu, 2008; Pelgrim, Kramer, Mokkink, & Van der Vleuten, 2013) and create an action plan as a result of quality feedback, according to Pelgrim et al. (2013). These researchers conducted a study for the purpose of "clarify[ing] the relationship between feedback, reflection, and the use of feedback" (p. 772). In particular, they wanted to find out if "trainers pay attention to trainees' reflections depend[ing] on whether they provide specific feedback" (p. 773). The results showed positive improvements in performance, and the researchers stated they discovered these encouraging results occurred only "in combination with specific feedback and they occurred more often in combination with specific action plans" (p. 775). This evidence suggests the reflection itself does not enhance performance; only when a specific action plan becomes instituted. In another discipline, Austin, Gregory, and Chiu (2008) aimed "to examine whether self-assessment and reflection-in-action improved critical thinking among pharmacy students (p. 2). This study centered on discovering if "the role of self-assessment and reflection-in-action . . . help[ed] individuals . . . identify situations in which heuristic reasoning is more efficient and sufficiently effective, and those situations in which algorithmic reasoning should be employed to optimize outcomes" (p. 2). As with the previous study, quality feedback, in this case in the form of questions during the process, aided critical thinking. Simply worded questions in this study revealed, "Self-assessment and reflection-in-action need not be cumbersome or complicated in order to have a meaningful and measurable impact on performance" (p. 4).

Writing, Reflection, and Critical Thinking

Reading, writing, and critical thinking emerged into processes that promoted critical thinking and enhanced learning (Al-Karasneh, 2014; Applebee & Langer, 2011; Deane et al., 2011; Graham & Hebert, 2011; Kennison, 2012; McKinney & Sen, 2012). Deane et al. (2011) upheld the argument

> reading, writing, and critical thinking can thus reasonably be viewed as different but complementary activity types that share a common underlying skill set . . . [with] complementary purposes . . . but combine in specific ways to define. . . practices of a literary community. (p. 13)

McKinney and Sen (2012) claimed, "Reflective writing assessments are appropriate for inquiry-based learning and constructivist pedagogies more generally and can stimulate deeper learning in students" (p. 127). These researchers concluded, "There is an established relationship between reflection and learning that has value for both students and teachers" (p. 116).

Since national assessments have become a reality, writing, in general, has become a focus, especially in relationship to reading. Applebee and Langer (2011) stated, CCSS which emphasized writing as essential and of equal value to reading in all content areas may lead teachers to stress embedding writing within all of their instruction in "high-stakes environment[s where] schools and teachers now function" (pp. 26-27). In a comprehensive study, Graham and Hebert (2011) conducted a meta-analysis, which aimed to discover "the effectiveness of writing as a tool for improving students' reading" (p. 711) and found a positive relationship between writing and reading comprehension. The researchers concluded, "Reading is critical to success in our school, work, and

everyday lives" (p. 732). In addition, the researchers found "while writing and reading are not identical skills, teaching writing has a positive carryover effect to improve reading" (p. 734). Kennison (2012) agreed about the importance of reflective writing and ascertained "with foresight and planning, reflective writing may be an empowering strategy for facilitating students' thinking skills" (p. 306). The famous historical social critic and American author James Baldwin is quoted as saying: "Read, read, read, never stop reading when you can't read anymore . . . WRITE" (2015, Tweet).

Several studies show reflection and writing positively influence student learning (Al-Karasneh, 2014; Cagas, 2012). In Jordan, Al-Karasneh (2014) sought to investigate the effect of a new concept of having student teachers learn from their experiences by their use of "journaling as a tool of reflective and constructive learning" (p. 398). Al-Karasneh (2014) concluded, "Finally, the result underlined that journal writing encouraged student teachers to be motivated learners" (p. 404). Cagas (2012) arrived at similar results with writing boosting thinking. The researcher conducted an action research study to "determin[e], "the effect of metacognitive and transformative approaches on the performance of the high school students of Liceo de Cagayan University, school year 2010-2011" (p. 151). The "results of this study clearly show that both metacognitive and transformative reflection approaches in teaching Values Education are effective in improving the cognitive skills of the student" (p. 157).

Writing connected to goal setting can accelerate student achievement; however, in other contexts, one research study indicated people may want to avoid facing their goals and therefore the goal setting would be ineffective (Oeller, Theiler, & Wu, 2012; Webb, Chang, & Benn, 2013). Oeller et al., (2012) formulated a study examining students using

"LinguaFolio . . . a portfolio that focuses on building autonomous learners through student self-assessment, goal setting, and a collection of evidence of language achievement" (p. 156). As part of their portfolios, students logged data from "current and past experiences with language as well as their learning habits and strategies" (p. 156) to measure "their own language" (p. 156) abilities and set a plan for improvement. More specifically, this study aimed "to analyze the relationship between goal-setting ability and second-language performance for high school students in the Spanish language classroom" (p. 157). The researchers concluded, there is "a significant relationship between a student's ability to set goals and language achievement in the Spanish language classroom. A growth relationship was also revealed, with growth in goal-setting ability significantly relating to growth in proficiency" (p. 164). Thus, having students engaged in goal setting and reflection heightened their learning experience.

However, from a psychological perspective, and in an educational setting, Webb, Chang, and Benn (2013) claimed, "Although there are times when people are motivated to monitor their goal progress, there are also many instances in which people do not monitor their goal progress, even for goals that they rate as important" (p. 795). Therefore, the researcher of this study concluded simply setting up a self-monitoring system does not necessarily yield success. Webb et al., (2013) believed, "both theoretical frameworks and empirical research suggest that monitoring goal progress can facilitate effective goal striving . . . ; in many instances, people avoid or reject information that would help them to assess their goal progress" (p. 802). For instance, "people with diabetes [may not] monitor their blood "sugar levels, and [some may not] "monitor their household energy consumption" (p. 802). The authors of this study suggested, among

other reasons, people may lack the drive to follow through with a plan of action. One explanation, stemmed from the idea that "avoidance of monitoring is part of popular culture . . . ignorance is bliss'" (2013, p. 802). The implications for the reading program, then, may suggest teachers need to find personalized and innovative ways for students to see a purpose in their self-monitoring that may have to go beyond an 'it's good for you' mentality.

Purpose and Effectiveness of Reading Interventions, and Critical Thinking

According to Solis, Miciak, Vaughn, and Fletcher (2014), researchers with "the Texas Center for Learning Disabilities (TCLD) engaged in a long range study to explore the effectiveness of the RTI (Response to Intervention) modeled in the middle grades for struggling readers." However, Cantrell, Almasi, Carter, and Rintamaa (2013) argued the model did not suffice without the teacher "in the classroom [who] played a significant role in reading improvement" (p. 49). Solis et al. (2014) concluded that reading interventions were important in meeting the needs of struggling students. Although Cantrell et al.'s (2013) study of slightly older students in high school showed positive results from reading intervention, their research stressed the importance of the teacher's efficacy. The results showed "that program adaptations are associated with higher outcomes for reading comprehension and overall reading, especially when teachers have strong preparation and high personal efficacy" (p. 49). These researchers suggested the teacher has a strong influence in the struggling readers' classroom and lead students toward developing higher order thinking; "[t]his is especially important for the teaching of complex and challenging metacognitive processes such as reading strategy use" (p. 49).

Summary

During the time of this action research study, 2014-2015 school year, this researcher noted a gap in the literature in respect to a reading class which included all of the following components: GRR; interertextual blogs that mirrored the Smarter Balanced test for tenth graders; a university partnership between college students and struggling readers; staff, parent, and teacher responses to blogs; reading strategies that focused on argument structure; SAT and ACT vocabulary development; a Reading Plus online program aimed at increasing silent reading comprehension, vocabulary, and fluency; choice reading in the classroom; Fountas and Pinnell (2014) assessments to monitor oral and silent reading comprehension; student written reflections and writing in the classroom; and a teacher action research journal to monitor, reflect, and alter instruction within the course of the year. Although research supports the effectiveness of the previously mentioned individual components to enhance critical thinking, no research exists about a reading class structure on the secondary level with this previous mentioned combination of elements. Therefore, this study is the only one that combines these class components to examine their effectiveness in enhancing critical thinking with students who are two or more grade levels behind in reading.

Pearson and Gallagher (1983) touted the effectiveness of students gaining autonomy from a gradual release of teacher modeling to student choice. Intertextuality served as a rigorous way students engaged with texts. The NGACBP-CCSS (2015b) shared the importance that students encounter texts juxtaposed together, which led to

higher order demands required in student assessments. Zheng (2013) saw that blogs helped build community and set the framework for student investment into their own learning within a global context. Teaching vocabulary and various reading strategies led students to think more deeply and have means to tackle various levels of texts (Frayer, Fredrick, & Klausmeier, 1969; Patesan et al., 2014). Although Reutzel, Petscher, and Spichtig (2012) supported the Reading Plus online program, these researchers emphasized the importance of interweaving the program with other reading enhancements, especially for the more struggling students. In a normed program, Fountas and Pinnell (2014) viewed assessing students' oral fluency and accuracy and silent reading comprehension served as a tool whereby teachers could gather data to inform their instruction and valued students needing to handle more complex texts. Although building choice enhances students' learning, Patall (2013) qualified and asserted that choice and interest both interact together for maximizing student learning. As part of teaching students the importance of writing, studies showed reflection and writing positively influenced student learning (Al-Karasneh, 2014; Cagas, 2012). Finally, Al-Karasneh (2014) emphasized the teacher as learner as essential in the process of student learning.

This literature review offers an overview of current studies, pedagogical theories, and methodologies pertaining to components that when combined, may lead struggling high school readers to develop critical thinking skills. For the most part, the literature supports the theory that if teachers emphasize the following aspects, students critical thinking increases: reading strategy lessons, GRR model, a reading community, blogs, choice, intertextuality, on-line programs, assessment tools, reflection, and writing and

reading's recursiveness; however, this researcher discovered limited studies on the use of the Reading Plus program with struggling readers. Although the studies supported choice in the classroom, one study by Patall (2013) showed evidence that interest as a variable that contributed to choice positively affected achievement. In addition to promoting critical thinking, the literature supported the preponderance of critical thinking on high stakes mandated tests (Herman & Linn, 2013).

In the next Chapter Three, this researcher conveys the methodology of this study and describes the participants, framework, and procedures. Chapter Four delineates the results and analysis, and Chapter Five offers the researcher's conclusions, discussion, implications, emerging themes, and recommendations for further research.

Chapter Three: Methodology

The rationale for using action research in this study originated from the researcher's belief that due to the multiple components of this course framed to increase critical thinking, this methodology served as a way for both the researcher to examine a pedagogical framework and also for the students to gradually take ownership of their own learning. According to Dick (2015), "Action research is not so much a methodology as a meta-methodology. Its cyclic iteration between action and reflection confers great flexibility, increasing its relevance in complex situations" (p. 440). In addition, Dick (2015) further explains that when students immerse in this approach, their involvement substantiates and extends the viability of the research.

Teachers, counselors, reading specialists, and administrators offered a list of recommended students for the reading class who fell two or more grade levels behind based on the state standardized assessment in Reading and English Language Arts and who showed academic struggles. Within the first few weeks of the school year, this researcher administered the Reading Plus (2014) Benchmark online assessment, as well as, the Fountas and Pinnell (2014) assessment to approximately 40 students to determine if the students fell two or more grade levels behind in their reading comprehension.

Within the first nine weeks (first quarter), the teacher offered various reading comprehension and vocabulary strategies to the identified students using Pearson and Gallagher's (1983) GRR method, "a journey from total teacher responsibility . . . to total student responsibility" (p. 337). The teacher created generic rubrics (Marzano, 2013, p. 12) (Appendix D), which measured the skills learned, and each student placed his/her

evidence in a folder kept in the classroom. The rubrics tracked the students' development as they progressed throughout the school year.

At the beginning of the second nine weeks, the teacher introduced the blogs, and used the rubric that aligned with the Smarter Balanced Critical Thinking Matrix (Appendix A), as well as, the teacher-created rubrics that aligned with the Common Core State Standards in Reading (Appendix E) to assess each student's growth. The blog prompts for this quarter included one text; the teacher encouraged students to invite participants to respond on the blog and invited teachers, parents, administrators, school staff, and/or university students to participate in the blog responses by either addressing the prompts themselves and/or responding to the students' writing.

The teacher sent e-mails to parents and staff inviting them to join the blog conversation, as well as, provide a response in the blog link. The teacher conversed with the university professor and developed criteria beforehand as a component of the university student's education course requirement. The university students responded to approximately 10 blogs, and the teacher requested they ask probing questions, comment on the student's argument, and/or offer their own analysis of either the student's writing or the article as it related to the prompt. The texts linked to the blogs for all to have access.

The university professor assumed responsibility for finding a university student to count the blog entries and charting their responses per thoughtfulness and length. Throughout the next two quarters, five of these university "blog buddies" came to the high school to tutor the students in reading. The teacher provided the assignment, which assisted students in blog responses and/or helped them with other reading assignments.

The goal was for students to become independent and, as Pearson and Gallagher (1983) noted by "taking all or most of that responsibility" (p. 338), the goal of the GRR model.

This high school required students to use the Jane Shaffer method of writing that included three supports plus transitions, topic sentences, and commentary; therefore, students were familiar with this type of claim and evidence. A one-page response equated to approximately a full page (Intro to Jane Schaffer Writing n.d., p. 6). In addition at the time of this study and over these past two years, some students practiced Toulmin's (1958) argumentation model. Students wrote nine lines on the blog, which included both claim and two pieces of evidence, and because the blog was a more informal writing, students sometimes extended their argument to include reflection.

According to Anderson and Briggs (2011), "Teaching reading and writing as reciprocal processes is a powerful tool for supporting struggling learners" (p. 4). At the end of the first semester, each student wrote a self-reflection of their critical thinking progress as evidenced in their selection of two prompts from a list of five; they also typed one full page with 12-point font that included their reflection, evaluation of their progress, and self-developed goals. According to Rusche and Jason (2011), "Critical self-reflection not only improves students' critical thinking skills but also helps students develop self-knowledge" (p. 339).

During the third quarter, the teacher added the intertextual prompts and administered the same Critical Thinking Matrix, the teacher made rubric which aligned with CCSS, and Weltzer-Ward et al.,'s (2008) Critical Thinking Assessment Framework (TAF) (Appendices A, B, & D). Student participants had a drop schedule, which meant students alternated between meeting three times per week, four, or five. In addition to

these blogs, the students continued to learn various reading strategies, engaged in self-selected silent reading books, and used the Reading Plus on-line program two-three times per week. According to Reading Plus (2014), "Ideally, students complete one or two sessions, two or three times per week, and each session lasts between 30 to 45 minutes" (para. 3). In addition to the researcher documenting information on the rubric, the researcher wrote in an action research journal three times a week to note any modifications, teaching strategies, and methodological adjustments necessary based on students' needs. The action researcher, Ortlipp (2008), stressed the importance of journaling: "Keeping and using reflective journals enabled me to make my experiences, opinions, thoughts, and feelings visible and an acknowledged part of the research design, data generation, analysis, and interpretation process" (p. 703).

During the fourth quarter, students wrote in their blogs, and the researcher either assigned groupings or encouraged students to self-select working with other students to determine effective reading strategies and meaning of the blog prompts. Within the last three weeks of fourth quarter, students received another Reading Plus benchmark and Fountas and Pinnell assessment. The researcher wrote anecdotal observations one day per week in a journal, which "include a variety of data such as observations, analyses, diagrams, sketches, quotes, student comments, scores, thoughts, or even feelings and impressions" (Johnson, 2012, p. 2). Using the GRR, model, the teacher tracked each student's progress and placed the report in individualized portfolios; as the year progressed, each student tracked his/her progress using the assessments summarized in Appendices A, B, D, and E.

Throughout the course of the year, this researcher kept an action research log to reflect on the use of specific instructional practices, log tutor interactions, which included both successes and challenges, log phone calls to parents, and note conferences with students. This anecdotal record chronicled the interactions and student communications and cataloged specific lessons with behavioral, pedagogical, and reading, critical thinking, and writing help from tutors and their observations of student behaviors reported to the researcher. The log included quotes from both university and reading students. The log's purpose, as the researcher designated, allowed the researcher to participate in reflective practice and monitor students learning through anecdotal evidence.

Methodology

Research Questions. For the purpose of this investigation, the research created the following research questions:

RQ1. How does the use of intertextuality and the establishment of blogs as a communication forum, examine student ideas, allow students to express their opinions, and respond to others' viewpoints, serve as a way to promote critical thinking?

RQ 2. How do struggling high school readers develop critical thinking as they respond to prompts that mirror the Smarter Balanced test?

RQ 3. How do reading instruction and course design affect struggling high school readers' critical thinking and help prepare them for the upcoming tenth grade Smarter Balanced tests?

RQ 4. How does the Gradual Release of Responsibility model in connection with

a reading community blog with prompts, that replicate the Smarter Balanced test, help develop and improve struggling high school readers' critical thinking?

RQ 5. How do reading strategies, structure, and collaboration affect student learning?

RQ 6. Since the Smarter Balanced test requires that students read at or beyond grade level, how do teachers prepare struggling readers to experience success when they are two grade levels behind in comprehension?

RQ 7. How does the teacher modify teaching strategies based on analysis of critical thinking progress?

Participants. The participants originally included 41 ninth and tenth grade student participants in three classes located in a public Midwest high school, but ended with 35 participants. Some students left the high school during data collection due to relocations, and one student who met the exit criteria left the class at the end of first semester. For this study, exiting the Reading Focus class meant students needed to attain an A or B in reading and English and achieve the highest level, the eighth grade score, on the Fountas and Pinnell Benchmark assessment, as well as, reach grade level on the Reading Plus online program. Another student withdrew per parental request. Consequently, this study included only 35 students.

Among the 35 students, over half were at-risk due to circumstances: seven of the students recently transferred to this high school from unaccredited school districts within the county. Three students had either an Individual Education Plan (IEP) in reading or written expression, and four had 504 plans with accommodations, such as seating

preferences and time extensions built into their educational plan. Among all of the students, three were absent for 10 days due to fighting, three within the same classroom. The altercation took place in a hallway right after school ended, and two received out of school suspension for their first fighting offense.

Each of the three classes within this study was unique in its makeup. One reading class consisted of three freshmen and two juniors that operated alongside a Special School District (SSD) class of five. This researcher added this reading class to lower the numbers within the other two reading classes. The SSD teacher decided at the end of first semester to join the Reading Focus class design and instructed those students to complete some of the assignments and blogs, as well as, work on the Reading Plus online program. One class contained all tenth graders, and two additional students transferred to two all-freshman classes. As the year developed, one student did not enjoy being the only tenth grader within the freshmen class, even though the student chose to join this group after the researcher asked for volunteers. The other student transferred into the reading class at the semester from another teacher's class (one other reading section within the high school) per the student's request.

Of the 35 students in these three classes, 19 were males and 16 females. All students within the course of the year were 14, 15, or 16 years of age. Of the 35 students, 32 were African American, and three Caucasian. Administrators and counselors placed the students in the classes based on grades, teacher recommendations, and standardized tests.

Tutors and bloggers. The university students for the blog collaboration included 26 undergraduate students — five who served as tutors and bloggers. A university

liaison set up the collaboration with an education professor, and the university education course served as a requirement for various disciplines and majors. Some of the tutors and bloggers planned to become teachers, and others chose other professions, such a medicine or history. The course required 50 service hours for the semester, and the professor counted one hour for each blog response. The five tutors and bloggers earned all 50 hours with the reading students, and the others earned community service hours in numerous other areas.

Student teacher, community service field supervisor, and high school staff. This researcher initiated the contact of a student teacher, who was from this university and who worked in the high school, and the community service field supervisor at the university to serve as the liaisons among this researcher, the university professor, and the university students. The student teacher served as the moderator of the blogs in terms of counting entries and sharing email updates, such as relaying the monthly high school schedules. The high school staff, who responded to blogs, included the following: the high school librarian, high school teachers, one high school administrator, reading students' parents, one district facilitator, and one instructional coach at the middle school.

Classroom context. The method for establishing clear goals, expectations, motivation, and community based on the concept of democracy began on the first day. Each high school classroom contained a teacher desktop computer, which projected onto an Active Board (an interactive screen where a teacher or student can write or the desktop computer can reflect). The teachers had the option to use the remote control to blank the screen, and this allowed the teacher to only view from the desktop. On the first day, the researcher showed an original Flipchart on the Active Board created through the software

program ActivInspire, which the school district made available to each teacher. This program interacted with a large drop down screen and the desktop (or laptop computer with a dongle) to enable this interactive feature. The teacher constructed the lesson based on Gladwell's (2008) 10,000 hour rule and used YouTube video clips of the author referencing various people who had spent countless hours practicing or investigating how to successfully reach their goals. The students then learned about the components of the class, which included independent reading (their choice books with no parameters), responding in a reader response log by writing three sentences to various reflection questions each time they read; practicing reading strategies; writing blogs; and engaging in SAT, ACT, and transfer vocabulary word study.

Transfer words included a list of words the high school's Literacy Committee deemed non-content specific, stretched across all disciplines, and reflected words students had trouble discerning on the state standardized test (e.g. arbitrary, formulate, pertinent, feasible, etc.). In addition, some teachers in the building from various disciplines, displayed posters of these transfer words within their classrooms. The researcher directed students' attention to the list of transfer words posted on the back wall in the reading classroom and from the list of ACT and SAT words (vocabulary used on the ACT and SAT national standardized exams used as criteria for college entrance), students chose words each week from a comprehensive list. Students selected words from any of these three lists, and the researcher guided them to choose unfamiliar words. One example of a vocabulary strategy to learn and apply words from the previously mentioned lists was the Frayer Model that represents a particular method. This structure includes an analytical process, which involved constructing sentences to explain the

concept/vocabulary word, drawing a visual representation, drawing an antonym visual, and finding representative examples (Frayer, Fredrick, & Klausmeier, 1969).

In addition, the researcher explained research based reading strategies that reflect whole texts and excerpts from both fiction and non-fiction. Students and the teacher primarily used non-fiction texts from *Time Magazine, New York Times Upfront Magazine,* Newsela (2015), which allowed students to select their own articles based on lexile levels. In the Newsela (2015) website entitled Easier to Find Easier to Read, the creators suggested their mission included finding "an innovative way to build reading comprehension that's always relevant" (para. 1). According to the website *The New York Times Upfront Magazine* (2015), their mission reflects CCSS, uses National and global current events, and reflects a collaboration between the journalists' and magazine's educational experts.

The researcher explained other current event sources that both teacher and students could use, discussed samples of types of fiction excerpts, as well as, introduced the concept of students examining current global issues. The teacher selected models primarily from a ninth grade reading level and higher until the students selected their own articles, containing texts at their reading levels. Students learned during the year, the teaching and learning process reflected the GRR since the researcher found articles, helped students read texts aloud, modeled strategies, and then released the responsibility to the students who would then discover their own articles on self-selected Global Issues from a Global Issues website. Students then applied various reading strategies and the Toulmin (1958) model after the researcher introduced these processes. The researcher

shared a definition of democracy and invited students to work in pairs to create class guidelines based on these principles.

The year's reading strategies primarily stemmed from Harvard's Library Research Guide (2011), which outlined six basic methods all good readers used when interacting and comprehending the text. Examples included "previewing . . . annotating . . . outlining, summarizing, analyzing . . . looking for repetitions and patterns . . . conceptualizing, and compar[ing] and contrast[ing]" (pp. 1–2). In addition to these strategies, the researcher also included active engagement strategies that focused on literary concepts, such as metaphors. For example, one reading assignment included entering a magazine Twitter concept with metaphorical language and/or concepts. Students also sometimes used their Notability App and other applications for note taking and practicing reading out-loud with their iPads.

After demonstrating with models in class and offering individual and partner graphic organizers, the researcher introduced the Toulmin (1958) argument framework. The researcher encouraged students to utilize this model, and as the year progressed, the students found their own articles. The researcher modeled examples, applied the argument structure, and in addition to peers, and university tutors, provided feedback to students as they wrote on KDocs, the school's filtered version of GoogleDocs. The researcher used the Highlight and Insert Comment feature for syntactic, argument, and grammar suggestions.

After the initial introduction, the students completed a learning and reading inventory, which helped the researcher and librarians guide students' choice book selections. In addition, the inventory gave a snapshot of students' interests, which could

help with motivational guidance. The specific inventory instrument came from Heacox's (2002) questionnaire, which included questions such as, "What is your favorite activity of subject in school? Why? Your least favorite? Why?" (p. 29). Other questions asked students to rank order subjects, various learning styles, and answer questions. The year's instructional methodology sequence included each student taking the InSight with Reading Plus, a screening assessment that took about an hour, which measured fluency, reading comprehension, vocabulary, and reading motivation. The program then set the students two grade levels below when they actually started working on the program, and they began lessons that stemmed from this first placement. The website entitled Reading Plus InSight (2014) claimed this first assessment "is . . . comprehensive [and yields] data to identify instruction that meets the needs of each learner" (para. 1). The goal of this initial assessment, then, "serve[ed] as a universal screener and placement test. Administrators and teachers can administer [the] InSight assessment up to two additional times throughout the year as benchmarks to measure student progress over time" (para. 2).

After students took the InSight, they completed nine lessons per week, five for See Reader (fiction and non-fiction readings and/or pairs of readings) and four for Read Arounds, vocabulary practice to differentiate multiple meanings for words and their syntactical accuracy within a sentence. Some students used the third part, iBalance, a specific program on Reading Plus, to help with fluency for those who showed through the Second Benchmark test in December (an assessment similar to the screening) that their fluency had not progressed. According to the website entitled Reading Plus (2014), with SeeReader students need to demonstrate progress by reaching a weekly 80% average.

This researcher periodically viewed their progress. Students saw their scores immediately upon completing the readings and answering the comprehension questions. Reading Plus SeeReader (2014) indicated "students see a record of . . . [weekly completed] assignments. [Students earn] a combo when a student achieves a comprehension [of] 80% or higher on two consecutive lessons. Students must earn multiple combos on each SeeReader" (para. 15-16) to advance to a higher reading level. Students took a second Reading Plus Benchmark assessment (similar to the screening) at the end of the first and second semesters. This assessment typically took each student about an hour to complete.

After the InSight, students worked in class during each week in their study blocks, and sometimes came to the Reading Focus room before and/or after school. The researcher checked each Sunday evening (the new week on Reading Plus rolled over to next week on Sunday evening) for the nine lessons at 80% average. The high school operates on a drop schedule, which means each day one class drops. The result was that students meet in each of their courses for three, four, or five days per week.

Periodically the researcher called home and emailed for encouragement and reminders to both parents and students; however, remained cognizant that some students did not have Internet at home. The reading classroom had enough desktop computers for each student; in addition, since the district instituted one on one iPads for students, they could use the Reading Plus app if they preferred this method. The instructor designated the desktop computers to face toward the center of the room, so anyone standing behind the student or sitting in the middle of the classroom could see students' progress.

During these lessons, the researcher guided the students through the reading process and encouraged students to seek help if they needed assistance. Sometimes the instructor sat beside a student and read aloud the passages or helped the student read through all of the question options and use logic to decipher the correct answers. The program allows from one to five rereads, which means for some of the questions, the program does not permit the student to return to the text. At times, peers helped with the questions and readings. Also, some students selected the same readings and worked alongside each other. The Reading Plus program gave students reading selection choices, which ranged from fiction to non-fiction selections and included both classic excerpts or full stories and current events selections.

Toward the end of first quarter, this researcher asked a student teacher field representative, who frequented the building due to supervising various student teachers, if the university had any interest in a collaborative partnership with university students and the struggling readers to improve critical thinking by tutoring and/or blogging throughout the course of the year. The liaison suggested a particular education class that required community service, and in collaboration with this researcher the liaison sent several emails back and forth to discuss the requirements, such as timetables, and number of blogs. In addition, this researcher planned an introductory meeting and attended the university class to show a PowerPoint overview of the reading students' demographics and university students' expectations in helping the students improve their critical thinking. This researcher stressed to the education students their blog responses would contain feedback, argument clarification, and grammar and spelling accuracy did not fall under their realm. This researcher held editing rights for the blogs, and the university and

the reading students could only share their first names and use their school email addresses.

The liaison then asked the education class for volunteers to see who wanted to blog and who preferred tutoring. Five tutors volunteered one semester and three the next. The high school's district required background checks for each tutor, and they had to sign in at the front desk each time they came and left. One of the bloggers, who served as a moderator for the blogs, ended up as a long-term substitute in the Social Studies Department in the high school; therefore, the researcher had easy access for updates and clarifications. Throughout the course of the semester, the university liaison and this researcher communicated on the phone about 10 times and exchanged at least 20 emails for the purpose of clarification and aligning calendars.

This researcher also met with the tutors at the high school in person prior to the beginning of each semester to explain that they would primarily help the students formulate the blogs, but sometimes they may read with the students with the online program, work on various strategies, and/or assist them in finding books of their interest. A few times, the tutors aided students in reading their social studies or science texts. The university students (approximately five the first semester and three the second semester) in partnership with this local university came to tutor. These students helped the high school readers with their Reading Plus program by reading with them and sharing encouraging words when students experienced success with the program.

Most of the time, the high school students worked independently with the online program. In addition, the researcher encouraged and counted extra lessons over the holiday breaks, and if students did not complete lessons one week and did extra ones

during the following weeks at 80% accuracy, the researcher adjusted students' grades to reflect a higher score. The extra ones during the holidays factored in to their grades. The Reading Plus program took students in class and out of class time, and the researcher assigned a weight of 65% weekly grades for nine completed lessons at 80% accuracy, in addition to the blogs, and all other assignments weighted at 35%. The researcher adhered to the other English department weights for assessments and assignment percentages.

The Fountas and Pinnell (2014) assessment consisted of a teacher listening to students read aloud, marking miscues, identifying types of strengths with miscues, reading silently, and answering comprehension questions. Two retired teachers, one a long time elementary reading specialist and current track coach, and one a retired science teacher who worked closely with the retired reading specialist to learn how to administer and interpret the assessments, came throughout the school year to give the assessments. These retired teachers served as the high school track coaches and volunteered to assist in the reading classroom as they had established some relationships with the students, wanted them to become better readers, and advocated for them to join track in the spring. One of the retired teachers served as the science teacher at the middle school for over 30 years, and the other retired teacher served as the reading specialist at the elementary school for 29 years. Both had a passion for helping students read, and both had expertise at administering and interpreting the Fountas and Pinnell (2014) assessments.

Due to this additional assistance, the researcher taught all five classes (approximately 10 students per class) with the exception of one smaller class consisting of five students. Since this researcher served as the English Department Chair, initially there were four classes because of one extra period for department duties. These retired

teachers supported and convened with this researcher to share results and implications. This researcher, through observation, noted high school students preferred to read aloud during an assessment with the adults versus being in the same room as their peers; therefore, time constraints made assessing all of the 35 students without assistance challenging. In many instances, this researcher co-administered the assessments during plan periods and/or homeroom periods.

Class lessons each week focused both on reading and vocabulary strategies and the teacher monitoring students' progress using Weltzer-Ward et al.,'s (2008) Critical Thinking Assessment Framework (TAF) and Marzano's (2013) Generic Proficiency Scale (Appendices A & D) and followed the GRR model as the year developed. For the first quarter, the researcher offered graphic organizers and, along with some of the students who volunteered, read aloud the texts. At the end of both first and second semesters, students selected and responded, on the computer, to three to five of the researcher's reflection prompts.

The purpose of these questions aimed at having students examine their progress, analyze various methodologies and teaching strategies that may or may not have worked for them, set goals, and/or evaluate the university blogging and tutoring reading community collaboration program. Examples from semester one included the following reflection and analysis questions of their work and thinking over the first semester. The first prompt aimed at students' assessing various reading strategies.

> Look through your folder, and tell what you found to be the most effective reading strategy and why. You may include Reading Plus, vocabulary, or any

other portfolio work. Use Russikoff's coined phrase: F.R.I.E.D.: facts/reasons/incidents/examples/details. (as cited in Hogan, 2011)

Another question focused on the online computer-reading program:

Write about Reading Plus. Explain what works for you as you progressed through the program this year. Tell what part of Reading Plus that you would advise the creators of this program to revise, add, or delete. Explain why. Give evidence.

Since the university tutoring and blogging collaboration threaded throughout both of the semesters, the next prompt instructed students to write in detail about the blog and tutoring experience. "Even though you may not have worked one-on-one with a tutor, explain how your development of argument helped your writing, reading comprehension, and critical thinking." The next question aimed at a self-analysis of themselves as readers and guided them to set goals: "As you reflect on your growth this past semester, please tell what you've learned most about yourself as a reader and what you reading goals will be this summer and as you plan to exit high school." The following question honed in on specifics by asking students to do the following: "Explain your specific reading plan for next year. Give specific examples."

Since the university students frequently assisted the students in finding books of their own interests in the library, this question's goal aimed at providing feedback for librarians, as well as, helping students to think of the librarians as a continual resource. "As I plan to help the librarians select books that you may enjoy next year. Tell the genre (type of book) that you like to read and why. Also, include a book that made an impact on you and why." Since some of the students enjoyed working with particular tutors, this prompt allowed them to give a response to someone other than the researcher. "Write a

letter to a tutor and explain specifically how she/he helped you develop your reading. Give at least three specific examples." The next question offered a holistic analysis of themselves as learners. "What did you learn most about yourself as a reader this semester? Give reasons, examples, and details." Another question guided students to foresee themselves in the future, which had them reflect also on their experiences as a reader. "If you were a parent, how and what would you explain to your children about reading? Again, give three examples."

Since juxtaposition and metaphor were part of their learning experience over the semester, this prompt focused on students thinking of themselves, with the poem as the catalyst. "Below, you may remember reading Maya Angelo's poem 'And Still I Rise.' Think of metaphors: comparing two unlike concepts and making a relationship between them." And the last example prompt from one semester incorporated a book that used excerpts from a text used throughout this school district. "How does Dweck's (2006) *Mindset* book apply to you as a reader? Reference the text, and give specific examples."

Reading Community Guidelines and Process

The researcher and university professor collaborated to formulate the framework for the partnership between the university students and the struggling readers. The project's goal was to establish a reading partnership through an Edublogs concept, a free blog site for educators, between the high school's struggling readers and university students for the purpose of increasing reading comprehension, engagement, and extending the audience for high school students as they communicated about timely texts placed in an intertextual framework. The reading levels of the ninth and tenth graders ranged from first through eighth grade. These texts included timely nonfiction, primary

documents, and literature that is short enough to post on a website for all community members to analyze and reflect on. Students also chose their books. The time period included fall and spring semesters, 2014-2015.

The researcher shared the High School Reading Focus class purpose and design with the tutors and explained that the purpose of the Reading Focus class was for each student to reach grade level reading. The texts included the Reading Plus (online program), which developed fluency, vocabulary, and comprehension; reading strategies with a timely weekly article and poem; self-selected books and reading logs; vocabulary strategies with ACT and roots/prefixes/suffixes; and structured blogs that centered on argument and opinion. This researcher required high school students to write a minimum of 10 sentences on each blog per week, with the exception of holidays and any other weeks when schools were not in session. The rationale for the 10 lines centered on allowing for the Toulmin's (1958) claim, evidence, and warrant. In addition, bloggers stated their opinions about the articles.

Reading Community Requirements Guidelines and Process

The following sections distinguish with discussion the university students' guidelines and process from the university students' blogger guidelines and process.

University students' guidelines and process. Each university student needed to have at least one blog response for each high school student per week. The university student did not have a specific person to respond to via the blog, but remained cognizant of each high school student needing to have a response. The university student posted no later than midnight on Sunday. (The researcher provided a specific calendar for postings, which included both the readings and the prompts, even when the student selected the

articles further into the year.) In addition, all students (university and high school) used their school e-mail addresses and the Reading Specialist monitored the blogs. Students *only* corresponded through this blog with no other communication

University students' blogger guidelines and process. The high school Reading Specialist (this researcher) either Skyped or went to the university to give an overview of high school student reader profiles and share the Edublogs concept, created a blog for Honors tenth graders, and shared this model as an exemplar for the university students. Instructions included the following: **"**Please see below an example of the blog Honors 10 students used last year with Library of Congress *Books That Shaped America* and intertextual prompts: "Books That Shaped America." The researcher explained the high school valued all students' achievement and support, demonstrated how to use the rubric to assess each blog, wrote letters of recommendation for each university student who completed 10 blog entries, and wrote detailed recommendation letters for each tutor that included specific contributions the university students made.

Each university student completed tutoring and service hours in accordance to the university's course requirements and sent out their tutoring schedules prior to the date they began. The researcher provided reading strategies and texts for the lessons and monitored the blogs. All students only corresponded through this blog with no other communication permitted. University tutors needed tuberculosis (TB) tests and background checks, and the university liaison gave hard copies to the Reading Specialist who sent to the high school's district central office. Students used first names only on the blogs. The times varied because the high school operated on a drop schedule. Normally, the first freshman class began at 8:50 a.m. and the second at 11:35 a.m. (although the

drop changed the times somewhat). Per the university's education class requirements, all tutors and bloggers kept anecdotal records of their experiences. Table 1 represents instructions and protocol this researcher and the university liaison shared with the university students and provides a template for contact information if the students and teacher need clarification or have questions during the semester.

Table 1

Blog Procedures Model

1. Log onto http://cananreading.edublogs.org (Do not use Internet Explorer).

2. Read the welcome blog, and then read the *The Ethics of Human Life Expansion: Opposing Viewpoints* prompt. Select Human life expansion debate link, and read the article

3. Select "comments," and peruse the students' comments. Select one (maybe two since all students need a response), and choose the "reply" button. You need your first name, school e-mail address, and then type your comment (14 lines converts to about 10 when posted.) Write in the anti-spam word, and then "submit comment."

4. Each week, find the new blog entry either underneath the previous one or on the side bar.

5. The researcher's school e-mail address:

6. Sample of university student's registration form for the project.

Name_____ Date
Undergraduate Graduate
Major _____Program _____
Minor _____
Current Address (with zip code):
Email:

Note: The researcher and university liaison each kept copies of the completed information in their records.

In addition to the university students' blogs, this researcher sent e-mails to retired English teachers, current high school principals within the researched high school, current secondary teachers and former high school teachers (one served as a facilitator and the other an instructional coach), and to parents for the purpose of inviting them to

correspond on the blogs. For the university students, the liaison and researcher clarified the purpose of the blog interaction was to enhance reading comprehension and critical thinking, and offer suggestions how to effectively provide feedback. The liaison and researcher discouraged the bloggers from correcting grammar and syntax. The tutors (approximately five first semester and three second semester) who came to the school also blogged and helped with reading class work. When they worked with the high school students in person, sometimes they aided with constructing grammatical phrasings, making meaning of the article prompts, finding articles, and writing with the Toulmin (1958) methodology of claim, evidence, and warrant. The researcher used the self-created blog rubric and TAF system (Appendices B & E) to measure reading comprehension and critical thinking. A retired English teacher also assessed the blogs using the TAF system. In addition, a few of the high school's National Honor Society students tutored the reading students.

Summary

This action research study, which aimed at developing critical thinking with high school struggling readers, included first establishing a democratic classroom community and offering students a course overview. The researcher told the students they would use the online Reading Plus lessons to help with comprehension, fluency, and vocabulary; be assessed on oral reading and comprehension with Fountas and Pinnell (2014) leveled texts; read self-selected books and write in reader response journals; and select global issues to apply reading strategies with first teacher models and then independently. Throughout the year, students responded to teacher-generated blog prompts, and university students commented on these blogs, as well as, helped the high school students

by tutoring in person. The researcher administered three benchmark assessments using the Insight portion of the on-line Reading Plus program. Finally, each semester, the high school students selected reflection prompts to assess their own learning and development.

Chapter Four includes results for the critical thinking development of the struggling ninth and tenth grade readers. This chapter reports the study's results and itemizes each research question. In Chapter Five, the researcher assimilates and discusses the results and limitations and offers implications for further research.

Chapter Four: Results

Overview

This action research explored the potential influence of the combination of a reading community, GRR, intertextuality, reading strategies, an online reading program, self-selected texts, blogs, university tutors and bloggers, staff bloggers, and self-reflection on struggling high school readers to develop their critical thinking. In addition, after reflection and adjustments, the researcher analyzed pedagogical strategies, assessments and instructional adjustments made throughout the year to enhance critical thinking. In essence, the teacher used an action research methodology to see if struggling high school readers' critical thinking improved after implementing the GRR while engaging students with intertextual texts within a reading community. The research design embodied seven research questions that focused on examining components of a reading class that aimed at improving critical thinking for struggling students.

The participants included 35 ninth and tenth grade high school struggling readers during the 2014-2015 school year. The researcher used a democratic community building strategy, assessments, strategies, and a university collaboration that wove together as the year progressed. The teacher incorporated evidence from reading strategies, online Reading Plus assessments, blogs, and reflections, as well as, an action research log to capture insights and site modifications throughout the year. The research study began in the fall of 2014 and ended in the spring of 2015.

Results by Research Questions

Research question 1. How do the use of intertextuality and the establishment of blogs as a communication forum, examine student ideas, allow students to express their opinions, and respond to others' viewpoints, serve as a way to promote critical thinking?

The researcher used the TAF critical thinking matrix and teacher-made rubrics in Appendices B and E to measure reading comprehension and critical thinking development in the struggling readers. After sharing and explaining the teacher-made rubric to the students, this researcher assessed the blogs; another high school teacher and reading specialist used the TAF to measure critical thinking.

To address Research Question 1, the researcher created 10 blog prompts that mirrored examples from Smarter Balance prompts and reflected CCSS. The blogs each began with the inclusion of single articles and developed into student choice articles. Each blog used the Toulmin (1958) method of claim, evidence, warrant; and began with an explanation of the method, graphic organizers, and teacher modeling. This process led to students using the method on their own with their own selected articles. The researcher generated blog postings, The Reading Community blog, and included the categories: Life on Mars; Outbreak! Latest on Ebola Virus; Your Reading Mindset? Defining Success; What does Veterans Day have to do with Us? Getting Informed and Ready for the Next Presidential Election; Proposing a Solution to a Global Issue; The Power of Metaphor; and Choice; and Art and Argument. Among the prompts were two texts from various current events news sources or book excerpt. Some of these texts were print-to-print; theirs included print with the following: cartoons that students found,

videos that teachers found, and abstract art and editorial cartoons that students selected. Some of the prompts had one teacher-selected text, and others had student-located texts.

To assess the nascent concept of looking at ways students potentially develop critical thinking, the researcher asked a high school teacher, who was a researcher and a reading specialist, to use the TAF system. This researcher used the blog rubric (Appendices B and E) to determine the quality of blog responses as they related to critical thinking. This researcher wanted the TAF analysis to be as bias free as possible, and since this outside grader had not been involved with the reading class or helping students with blogs as this researcher had, the high school teacher had an objective perspective. The outside grader offered a detailed analysis of each student's blog using the TAF matrix. This researcher drew conclusions after careful examination of the blogs and this teacher's analysis. According to Weltzer-Ward et al., (2008), to assess critical thinking in blog postings, "both the critical thinking process and structure were considered" (p. 11). Out of 35 students with 10 researcher assigned blogs, the average number of completed blots was 8.685. Of the 35 students, 15 completed all 10; one student completed five blogs (a student who met criteria and exited the class at semester); and one student completed three blogs. Weltzer-Ward et al. (2008) reported in their research findings, "the full critical thinking process was not evident because the students did not go through the development [across] . . . all of the stages: "initiation . . . exploration . . . solution . . . judgment . . . [and] . . . resolution" (p. 9). The researcher inferred there was mid-range evidence of critical thinking; however, the students did not reach the highest level to the resolution stage, the stage that "occurs when the participants agree upon a final solution or answer" (p. 9). The majority of the staff and university students who

responded to the blogs, though, did reaffirm and agree with the students' assertions. These responses served as a model for the students as to how to acknowledge and offer insight to someone else's analysis with the highest level: resolution. A typical blog response from one of the struggling high school readers after a student blogged in response to the prompt entitled Proposing a Solution to a Global Issue and offered the following solution:

> In the article entitled World Hunger and Poverty, the author claims world hunger is a terrible symptom of world poverty. The author said, " If efforts are only directed at providing food or improving food production or distribution, then the structural root causes that create hunger, poverty and dependency would still remain." This means if they continue to centralize their focus only on the issue of providing food, the problems of poverty and things that causes hunger will still be an issue. In the author's claim, he says basically poverty and hunger both benefit in a negative way and should be addressed equally. The quote connects to the author's claim because they both achieve the idea that both poverty and hunger are a big issue. I believe if the government effectively worked towards preventing diversion of land, poor growing crops," inefficient agricultural practices," and better crop fields poverty and hunger could be prevented. I believe what the Kid President says is very accurate; we can all work towards preventing issues happening in the world by coming as a unified people and fighting for the benefit of our very own lives.

The student had selected and referenced an article about world hunger and poverty.

Of the high school reading students, four percent engaged in exploration, which "includes all discussion which expands upon the problem or question to support formation of a solution" (Weltzer-Ward et al., 2008, p. 9) with the first five blogs; and 89% wrote solutions, which "includes both positing an answer or solution to the question or problem and the initial explanation of that answer or solution" (p. 9). Of the 35 students, 50% offered solutions in the first five blogs, and 50% in the second half. Of the students, seven percent used judgments, which indicated "all discussion where the answer or solution is debated, modified, or tested" (p. 9): 59% in the first half and 41% in the second half showed a decrease occurred from one semester to the next. This process indicated although the students primarily formulated solutions when responding to the blog prompts, the solution category was higher than initiation, which meant "identification of a common question or problem and discussion to insure [bloggers understand the] question or problem" (p. 9). Students also formulated solutions more than explorations, which "include all discussion which expands upon the problem or question to support formation of a solution" (p. 9). Therefore, the students somewhat met the critical thinking criteria in this area, but the data was inconclusive because there was not movement to a more advance critical thinking analysis level**.**

Next, as Weltzer-Ward, et al. (2008) found in their research: "The structure of the posts and discussion . . . suggested critical thinking was evident even when the bloggers did not show evidence they implemented all of the levels in the matrix. Likewise, even though all of the researcher's high school students' blogs lacked mastery of these five components within the blogs of this study, with the exception of one; all blogs had claims, and the average from a "1 to 5 rating" (p. 10), was a 2.613 average in the first five

blogs and a 2.7 in the second half, a slight increase (one was the lowest, and five was the highest). This researcher's data in this action research study proved significant because the evidence showed the blog quality increased throughout the year. The quality of the evidence opinions was somewhat higher with a 3.69 average in the first half and a 3.71 average in the second half. The evidence reference was even higher with a 3.81 average in the first half, increasing to 4.16 average in the second half. In the final category, evidence quote, the quality ranged from a 3.64 average to a 3.90 average. Because all but one blog had a claim, evidence supported each claim, and the average rose somewhat from first semester to the next; the researcher concluded that the prompts did elicit critical thinking, but not at the maximum desired level.

With this researcher's blog rubric (Appendix E), the results showed the blog ratings from 1 to 4: Below Basic = 1, Basic = 2, Proficient = 3, and Advanced = 4, using the CCSS for Reading Anchor Standards by The Council of Chief State School Officers and NGACBP-CCSS (2015b). The average rubric score for the ninth graders was 3.4625, and the average for the tenth graders was 3.458, a slight difference between the two grade levels but closer to the 4 points, the highest level on the rubric. In total, the average blog score was 3.46025. The evidence meant that if the mid-range of Proficient and Advanced is 3.5, then this average showed that students scored a 3.5 average on the Smarter Balanced criteria. In Chapter Two of the Review of the Literature, researchers concluded GRR, a reading community, blogs, and choice all contribute to critical thinking and learning (Bloom, 1987; Pearson & Gallagher, 1983; Morgan & Wagner, 2013; Woody, 2012.) The results of this research question indicate intertextuality, along with other class structures, enhanced students' critical thinking. This statement supports

the research of Hillocks (2011) who asserted the necessity of teaching students to "write strong arguments . . . a skill critical to participating in a democracy" (p. xv-xvi). As stated in the Review of the Literature in Chapter Two, students writing and thinking within an intertextual context, work recursively to develop critical thinking (Coetezz, 2013; Deane et al., 2012; Sanchez & Lewis, 2014).

Research question 2. How do struggling high school readers develop critical thinking as they respond to prompts that mirror the Smarter Balanced test?

Embedded in the researcher's goal to improve critical thinking was this researcher's creation of blog prompts that mirrored the upcoming standardized tests. The researcher created this research question for the purpose of examination of the alignment of the blog prompts with these standardized assessments. The answer to Research Question 1 showed evidence of students' responses to the prompts that mirrored the Smarter Balanced Assessment, such as the following prompt:

> The Kid President makes an argument that people get derailed in trying to solve problems by complaining, giving money, being loud and yelling, making fun of everything, letting smarter people do it, ignoring everything, being famous and cool, being powerful, saying 'It's Impossible to change the world.' He states, "Things don't have to be the way they are," and "ordinary people" can change the world. Using the Toulmin framework, state the author's argument on a global issue, and make a suggestion about how this issue can change for the better. *Include the author's claim, evidence of claim, and "explanation of how the data supports the claim.

In addition to the prompts as exemplified in the previous example, Appendix A represented the tool this researcher used to measure critical thinking when constructing assignments. According to the Smarter Balanced Assessment Consortium (2012a), their critical thinking assessment incorporated "a Cognitive Rigor Matrix that included: Bloom's (revised) Taxonomy . . . and Webb's Depth-of-Knowledge Levels" (p. 20). This matrix represented these methods as ways to assess "instruction, for influencing teacher lesson planning, and for designing assessment[s]" (p. 20). In each of the 10 blog prompts, the researcher developed ways to elicit critical thinking responses with each prompt increasing in complexity. Using the Toulmin (1958) writing structure, the first blog asked students a series of questions to consider after reading an article, thinking of their content area course work, and selecting their desired lexile levels, the prompt asked students to reference the article and consider questions excerpted from the first blog. The specific blog post, according to Canan (2014), asked the following: Life on Mars? Was there a possibility [of] life . . . on Mars? If so, what theory support[ed] life forms disappearing? Do you believe the atmosphere deterioration could happen to earth? If scientists [offered] the opportunity to travel to Mars, would you? (para. 1). These questions asked students to, according to the Smarter Balanced Assessment Consortium (2012a) matrix, understand, apply, analyze, and evaluate. The last prompt, according to Canan (2014) asked students to use intertextuality, more than simply embedding class information and referencing an article. The prompt suggested students select an abstract painting from Wassily Kandinsky, a self-selected Newsela article, and use the Toulmin (1958) methodology to describe the painting in detail (colors/images/lines /dimensions); compare and contrast the painting with the article. Think of author's tone (attitude),

theme, word choice, structure, or the mood the pieces generate (para. 1). This higher order thinking incorporated all of the forms of Smarter Balanced Assessment Consortium (2012a) matrix by asking students to not only understand and apply, but to analyze, evaluate, and create. The teacher-made prompts that encompassed aspects of the questions and the measurement tools aligned with the state's assessments.

Research question 3. How do reading instruction and course design affect struggling high school readers' critical thinking and prepare them for Smarter Balanced tests?

Similarly, in Research Question 3, the researcher incorporated various types of assignments that ranged from the basic level, *remember*, on the matrix to the highest level, *create*, and used all of the levels from the Smarter Balanced Assessment Consortium (2012a) matrix. The data collected to answer this research question consisted of giving students assignments focusing on using graphic organizers with ACT, SAT, and transfer vocabulary. In order to elicit how students processed and responded to their self-selected books, they wrote in a reader response journal. When focusing on argument, assignments ranged from students using graphic organizers and blogging by questioning the text with a *Time Magazine* article (create and understand); analyzing quotations; using metaphors in a Twitter contest with *Creative Nonfiction Magazine*; annotating the text with a *Time Magazine* article; analyzing and understanding text with a *Time Magazine* article; examining author's argument with a *Time Magazine* article (understand and analyze); understanding and applying *with Time Magazine*; constructing blogs; understanding and analyzing editorial cartoons; and applying the Toulmin (1958) argument with book excerpts. In addition, students worked on the Reading Plus online

program and wrote end of first and second semester researcher-created reflections. The students' second semester grade point average was 2.02; however, this average also reflected assignment completion but not exclusively assignment quality.

During the spring semester, 2015, the State of Missouri required all tenth graders to take the End of Course test (EOC), which mirrored the Smarter Balanced assessment matrix. Of the 14 reading students who took the test, 10 scored proficient and four basic**.** Of the 14 students who received a Proficient on the EOC, all of them on the Reading Plus online program had a reading comprehension, fluency, and vocabulary composite average score of 5.2 grade level equivalent at the beginning of the year (one student had 9.6 and another, 8.7), and 7.55 grade level equivalent at the end of the year. One student (the student who exited the program at the end of first semester) scored 9.6 at the beginning of first semester and 11.5 at the end of the semester; this score factored into the second semester's composite average. The researcher did not assign the fluency part of the Reading Plus program since the EOC was an untimed test; however, the fluency rate factored in to reach the overall proficiency rate on the Reading Plus program.

The overall increase from the beginning to the end of the year on the Reading Plus program was 45.1%. Among the students, 71% of the 14 tenth graders passed the EOC, yet the average grade level equivalent showed a score of 7.55, with the four students who received Basic at a 2.975 average grade level equivalent. The students who passed the EOC with a proficient score had an average score of a 7.72 grade level equivalent, which may suggest the students used additional strategies in conjunction with what they learned on the Reading Plus program to master the Proficient level of the tenth grade equivalent EOC. The students' data indicate that the course design with the

various components contributed to higher order thinking for the majority of the students. As stated in Review of the Literature Chapter Two, The Reading Plus program, self-selected texts, and students making article selections lead to higher order thinking (Reading Plus, 2014; Patall, 2013). However, Patall (2013) emphasized the importance interest plays in connection with choice to maximize the learning environment.

Research question 4. How does the Gradual Release of Responsibility model in connection with a reading community blog with prompts that replicate the Smarter Balanced test, help develop and improve struggling high school readers' critical thinking?

In addition to the previously shared results from the TAF blog critical thinking analysis and tenth graders Reading Plus improvement scores, the grade point average did not necessarily indicate improvement; however, in students' answers to this researcher's reflection questions from first and second semester showed students learned. The researcher's purpose for these questions aimed at students' assessment of their own learning and goal setting. Each set of questions contained 8–11 choices, and students typed their responses into the school's version of Google Docs and shared them with the researcher. In the Spring 2015 final exam, this researcher asked each student to address the following question among his/her blog responses. Since this researcher constructed the blog process with the scaffolding of GRR from teacher modeling to student independent choice, this researcher selected the following question as the one to analyze student responses:

> Review all of your blogs and blog responses for this year. What did you learn about writing the blogs (i.e., how did they help your reading and/or critical thinking)? Read through the blog comments people wrote, and write about at

least one (maybe more) of the responses that helped your reading, writing, and/or critical thinking.

One student exited at semester after meeting the criteria and did not write the spring final exam; this student's written response from the end of first semester showed how blogs connected to learning. Of the 35 students, one did not complete the assignment, and two wrote about other areas instead (e.g., Reading Plus). Except for two ambivalent reactions to the blogs in which both students shared they enjoyed and disliked writing the blogs and one negative response about writing blogs, all of the rest of the students shared how much they liked the experience. The students valued the blogs as a learning experience, which West (2008) revealed in his study of high school students that thinking develops when the boundaries of the classroom environment expand. Student reflections indicated this method of GRR increased their learning, which concurs with the researchers' conclusions in Review of the Literature Chapter Two. Researchers at various grade levels found the GRR method led to higher order thinking (Afshar et al., 2014; Choo, & Paull, 2013; Lloyd, 2004; Wagner & Morgan, 2014).

Research question 5. How do reading strategies, structure, and collaboration affect student learning?

With the collaboration, several students selected the prompt about writing hypothetical letters to their tutors on the fall final. One student wrote the following:

> Dear Tutor, thank you for stepping in to help better my reading when [the teacher] could not. You have really helped me as a reader and I have taken everything that you have assisted me with into consideration. You have taught me that if you don't try, there's no way you will improve. Not only try but also put forth the

> effort in my work. I can't expect everyone to think for me I have to think for myself as well. Whenever I would get stuck on something you would only give me pointers to help me but you would do that so I figure it out on my own. I learned that if you get answers all your life, you will never be successful. When you taught me to think for myself as a reader I took that into consideration for my learning process as well. As a student I sometimes want everything handed to me and I sometimes don't want to try to figure things out on my own but that has totally changed. Now because of you I think better, learn better, and I have become more successful. I remember when working on my blog I was too lazy to think for myself but you looked me right in the face and said if you don't put in the effort then you will forever be a lazy person and you will not be able to get into college like that. And ever since that day I persevere even when I don't understand something I try to understand before giving up. Because of that I have actually become intelligent I know more than I use to. I don't let people think for me anymore I think for myself. I only ask for help when I honestly don't understand and it's nothing wrong with getting help, it's the amount help given. So thank you for opening my eyes to see my faults and being able to fix them.

The majority of the high school students in both the fall and spring reflective finals shared one or more of the following: their successful reading progress, reading goals with several mentioned their desire to exit the reading class and increase the numbers of texts they read outside the school setting, analysis of their strengths and weaknesses; how they would be as parents to stress the importance of reading; some frustrations about either the blogs or the online program, as well as the benefits of each;

types of books they enjoy reading; examination of their motivation and how they felt confident in their skills; and letters to themselves in the future, outlining their reading successes and goals, in general. For example, one student wrote about goals for next year:

> I plan to read at least 10 books of my choice and at the 11th grade reading level. I think by reading 10 books at the 11th grade reading level will not only raise my reading comprehension but will also expand my vocabulary.

Another student shared reading goals for next year:

> I'm going to try to read a book every month that's my goal I want to achieve. I'm going to [read] for about a 1 hour at home. I'm going to go to the library on the weekends with my sister. I'm going to try to see if can help the librarian in the library. I'm still going to do reading plus because that's helps me in reading. I'm going to tell my English teacher about reading projects and stuff like that. I'm going to try and help other students in reading. I want to help others when reading.

Although most of the high school students did not specifically reference reading strategies in their finals, they applied the Toulmin structure to their blogs. The tutors all mentioned in person they enjoyed seeing students learn and tackle complex texts; one university student, however, mentioned there was too much choice for students. The tutors shared, they witnessed the varying reading levels and shared they had to help some more than others. One tutor used the opportunity to work with a student on a blog but instead emailed this researcher about a dynamic conversation about literacy:

> I just wanted to let you know that when I worked with [student] on Friday, we didn't get as much done as we should have on the blog because we had a really good discussion about how the growth mindset can be analogized to his experiences with football and wrestling. When I come in on Monday we'll finish it.

This evidence showed a high school student internalizing and transferring the Dweck (2006) *Mindset* article, which demonstrated an element of critical thinking. These results are in keeping with Gelder (2005), who claimed a person's ability to "identify some other context" (p. 43) shows an aspect of critical thinking.

Just as the tutors found it rewarding, the students shared how the tutoring experience gave them confidence. One student shared the following on the spring final:

> One of the college students wrote to me and said that she really liked my sources and how I made connections back to the story such as poaching of furs and also animals have the same issues as human beings. That really made me feel good because I felt like I have become such a better writer because of the compliments that I have gotten back from other students that are older than me.

In reference to the class structure with GRR, one student wrote on the spring final:

> It influenced me by giving me the responsibility to do my own work so I would have to do it and if I didn't do it I would get bad grade so I learned that doing your work is really not all that bad.

Many of the students demonstrated their ability to articulate how the course structure of reading strategies, structure, and collaboration affect positively affected their learning. In Review of the Literature Chapter two, researchers found a relationship exists between

reading comprehension and critical thinking, and one way in which teachers develop critical thinking is incorporating teaching reading strategies into their classroom lessons and having students practice these strategies (Aloqaili, 2012; Gelder, 2005; Harvey & Goudvis, 2013; Patesan et al., 2014; Peterson, & Taylor, 2012; Serravallo, 2015). Puro and Bloome (1987) suggested building a framework that creates a reading community increases student participation and learning.

Research question 6. Since the Smarter Balanced test requires students read at or beyond grade level, how do teachers prepare struggling readers to have success when they are two grade levels behind in comprehension?

This research question raised a concern about how teachers plan and implement lessons to help struggling high school readers. Two specific ways the researcher approached this dilemma was (a) through careful assessment of each student's reading comprehension, vocabulary, silent reading fluency, oral reading fluency and accuracy; (b) students' self-assessment of their awareness; and effective use of reading strategies and the Reading Plus online program. First, the researcher assessed each student's reading comprehension, vocabulary, silent fluency, and oral reading fluency and accuracy. Second, students self-assessed their awareness and effective use of reading strategies.

While Reading Plus exclusively measured silent reading components, the Fountas and Pinnell (2014) assessment gave insight into students' oral reading fluency, accuracy, and silent comprehension. Of the 35 students using the K–8, Fountas and Pinnell assessment (no high school assessment available at that time), the average grade level equivalent score was 5.7. However, of the nine students who scored an eight, their independent level could be higher. Since there was no other Fountas and Pinnell

assessment tool available for a higher level, the researcher factored in the eight. During these one-on-one sessions, the researcher and two retired teachers (one a former elementary Reading Specialist) had conversations with the students about the type of miscues the students made and ways they could practice at home. The number one advice to each was to stay vigilant with completing Reading Plus and to read books of the students' choosing.

When students completed each vocabulary session and text selection comprehension questions on Reading Plus, the program gave them a percentage correct immediately after they finished. As mentioned earlier, for the students to succeed, they had to score an 80% average for the week. At the beginning of the year, each student took the Reading Plus assessment, which took most students about an hour; at the end of the year, they also took an online Reading Plus assessment. These scores reflected fluency, comprehension, and vocabulary and gave a composite score. With the exception of the student who left at the end of the semester, the researcher included the students' end of first semester assessment in the data. For Research Questions 3 and 5, the researcher analyzed the tenth graders' Reading Plus scores in relation to the EOC; the following data includes all of the 35 students.

At the beginning of the year, the average grade level equivalent score was 3.66; however, since this assessment took at least an hour, the researcher noted some students may not have built in the sustainability factor and may not have finished with their full effort, which may have influenced the results. The program set the students' reading level based on this initial assessment. At the end of the year, the average for 34 students (one ninth grade student did not take the end of the year assessment) was a 6.16 grade

level equivalent. The average percent of increase revealed a 68.3% gain. Of all of the students, three students' scores went down, and four stayed the same; all of the other scores went higher with one student (the one who exited) going from 9.6 to 11.5 overall proficiency rating. After examining the total number of assigned lessons for the year in relation to the completed lessons, the results showed 184 average lessons assigned for the reading comprehension, SeeReaders, and the average of completion scores was 102.5. There was a 47% decrease in numbers assigned compared to the number of completed lessons. For the vocabulary, Read Arounds, where student had to decipher multiple meaning words and use the words in syntactically correct formats within contexts, the number of assigned lessons equaled 146.8, and the number completed were 95.3. This result meant there was a 35% decrease in numbers assigned with number of completed lessons. The researcher knew when checking the lessons throughout the year, the students gravitated more to the vocabulary lessons than reading the texts. In addition, the program shows each student his/her progress and graphs growth, so they have immediate feedback. The program set the amount of re-reads from 1–5, and the researcher encouraged students to request an increased number of re-reads. Otherwise, the program prevented the readers from returning to the passage. This data supports that when students conscientiously use the Reading Plus program then the program yields results. As stated in the Review of the Literature in Chapter Two, County (2015) conducted a program evaluation of ninth grade students who used Reading Plus with fidelity that showed "markedly improved student silent reading and comprehension rates" (p. 109) for students the district deemed "at risk" due to standardized scores.

At the end of first and second semester for their final, each student selected 3-5 researcher-made prompts to assess his or her progress. In the first semester, one question asked students to write about, "What you found to be the most effective reading strategy and why," and in both semesters, a question focused on the effectiveness of the Reading Plus program in their learning. Few students selected this question about reading strategies; however, most wrote about how the Reading Plus Program helped them. In the first semester, a student wrote, "I like how the Reading Plus program shows how you have progressed and pay attention to what I've read." Another student wrote, "Reading Plus helps me read and find the main idea. I read a paragraph about an NFL player; I read it over two times and it helped me become a better reader if I can find the main idea." Another student wrote, "Reading Plus helped me improve my thinking process." In the spring final, a student chose a prompt that asked her to write to herself, and she wrote the following: "Dear Self, . . .When you're doing Reading Plus I want you to ask . . . : [am I] paying attention to the reading, do I understand what I'm reading, Can I make any connection to help me, and am I learning anything from this reading." The student then wrote about the power of a growth mindset and having grit. Most students wrote about their goals, and many of their responses revealed they hoped to complete the class and improve their reading comprehension by reading over the summer with books of their choice.

In addition, students chose the question that asked them to write a letter to their tutors and one student wrote, "Dear Tutor, you have really helped me as a reader and I have taken everything that you have assisted me with into consideration." The student itemized the importance of trying hard, how to get unstuck, think for yourself, and think

better. The student ended by stating, “I persevere even when I don’t understand something I try to understand before giving up.” Reflection enhances learning and thinking. As stated in the Review of the Literature in Chapter Two, McKinney and Sen (2012) claimed, “Reflective writing assessments are appropriate for inquiry-based learning and constructivist pedagogies more generally and can stimulate deeper learning in students” (p. 127). Teacher pre-assessments, students’ Reading Plus results, EOC scores, and reflective writings indicated students’ reading and critical thinking progress among all reading levels.

Research question 7. How does the teacher modify teaching strategies based on analysis of critical thinking progress?

In action research, practitioner reflection was an essential element this researcher engaged in throughout the 2014-2015 school year. To begin this speculative process, this researcher kept an action research log, which included documented times tutors spent with the students, assignments the tutors helped the students understand and complete, interchanges between the tutors and the researcher, conversations between the student and the researcher, parental communication, anecdotal information within the classroom, and teaching modifications noted.

Also, some students came during their homeroom time (once a week) to work, and since this researcher did not have a homeroom due to responsibilities with the reading program, students frequently came to the reading classroom since they could convene with their friends, get one on one reading assistance, and work in a classroom without a large number homeroom students. An example occurred when two students came to work on assignments and to discuss grades and work on social studies,

specifically on the Electoral College; another student worked on Twitter and the reading class metaphor assignment. This researcher adjusted the time working with specific reading assignments to help students with their other content area assignments, and sometimes students came to work on math because they appeared to like the reading classroom as a place to work by choosing to go there. Other times, the retired reading specialist came to homeroom to help students with their reading assignments.

Frequently, the reading students decided to come to the reading classroom during their study block times and homeroom to work on the Reading Plus program. Over the holidays, this researcher adjusted the required nine lessons for reading plus and counted that time as added assignments put into previous weeks or counted extra, so students could stay motivated and focused with the program. A few others came during their lunch times to work on the program. For example, this researcher noted the following during homeroom time: "Three students here for Reading Plus; one friend came to help [student] with extended metaphor assignment, and a [student] also came to work on Reading Plus."

Other modifications included the researcher giving permission for students to dictate orally, so they could see their thoughts quickly put on the computer, and then the researcher relinquished the writing to the students. Usually the researcher did not allow other students to come in to work during homeroom, but if the friend seemed supportive and had his/her own work to do, the researcher allowed the friend to come. At times, the reading students' behaviors became problematic, so the researcher either had to call home or get help from one of the assistant principals. Other times, students' inquisitiveness drove them in other directions. A student came to work on a blog about the Ebola

outbreak graphic organizer, but instead, this student used homeroom to investigate a recent Ebola outbreak. The student had just heard from someone that there was an outbreak in a neighboring area, so pulled up a video and watched. The researcher suggested the student add that information to the blog response. No late policy existed for the reading class work, as students wrote and read at their own pace with the exception of the weekly Reading Plus lessons, which were not counted late but were challenging to make up if students fell too far behind. This researcher also served as a proofreader for the blogs, but made sure to articulate the rationale for all of the errors and to share writing rules.

This researcher frequently found the reading class required too many assignments and so the next time would limit the five-blog requirement for the semester. Reading, filling out graphic organizers, constructing blog responses, reading choice books, working on vocabulary, and completing the nine Reading Plus lessons did not prove feasible within the initial timeframe. During the second semester when the reading strategy modeling and limits for the pre graphic organizers for the blog lessened, the pace seemed more realistic. Sometimes this researcher pulled students out of In School Suspension or asked tutors to go there to work with the reading students, which helped when students were out of class. As noted in this researcher's journal, the following occurred: "[tutor] came to work with [student] – we got [student] out of In School Suspension – they are reading the excerpt from *Mindset* and then working on the Mindset blog."

This researcher met with the university liaison in person 2 times, communicated on the phone at least 10 times and on email had a minimum of 20 correspondences, and

met with the tutors 2 times to explain the importance of high expectations and how to write constructive responses to the blog entries. The tutors sometimes read the articles aloud with the students, asked them clarifying questions, or helped them construct their blogs and find evidence. At times, the reading students felt so proud, they excitedly shared their work with the tutors. When a tutor came to help, one student excitedly explained, “I did that," and then wanted to take a picture of the Homeless blog. Another time a student yelled, “That’s (tutor’s name) on the blogs!” Students laughed. Many times students helped each other find evidence and proofread.

Certain students stood out as quality proofreaders. Tutors helped students with their English assignments and even some science assignments at certain times. Since the tutors could not be alone with the students, frequently they accompanied the students to the library to work there. One tutor shared satisfaction in working with students in the reading program at all levels, but questioned whether this researcher gave too much choice for students, which led to student frustration at times. This researcher changed the policy of requiring students to work with any tutor who came and began to understand that mandating students to work with tutors became counterproductive. Also, some students preferred working with various tutors, and others requested the same one each week. One popular tutor was the university’s quarterback. Many students excitedly asked each week if this tutor planned to come that week. One tutor noted the following: “It's strange that some of the students can tell me the argument, but then they write something totally different.”

At times, parent communication resulted in working as a partner with a parent. An incident occurred in January 2014, when this researcher noted the following:

> Jan. 12th: yesterday I called home because the nine Reading Plus lessons not finished. [The student's] mom said the student finished but only got a 78%. She called back because the program wasn't functioning right; I told the mother to share to the student to simply restart the program.

Other times, this researcher left voice messages or sent email reminders about missing or upcoming work. One time, though, this researcher called home about a behavior issue when the student asked the researcher if he/she cheated on the [spouse.] Other behavior problems sometimes emerged. The researcher noted on the log the following: "student left class and yelled in the hallway 'stupid class!' I emailed home, and the student emailed back about not telling his mom he was disruptive, and that was not true." The student had intercepted the email exchanges.

Sometimes the phone call home came from a place of concern. One example occurred second semester when the researcher called home and shared motivation lacking. The mother was in the car and had the student listen on speakerphone. (The student later shared). This researcher explained how the student did not come for extra help during study blocks and did not seemed concerned with the D+ in reading. The researcher shared, the student was much more motivated last semester. The mother agreed and said she would speak with the student. The researcher also told the mother that the student, a current tenth grader, was almost at a seventh grade reading level and had improved throughout the year with almost a three grade level gain.

As the year progressed, this researcher adjusted from the one in charge of their learning to the one encouraging students to take more ownership. Noted on the log was information similar to "the student requested the speed lowered when reading on the

program," and another student asked the researcher to "change the number of re-reads." Something the researcher later allowed as the year progressed was making a grade level adjustment to bump up the student on the program per his/her request. The researcher noted that the initial Reading Plus placement assessment may not be an actual indication of the student's reading level because some students may not have the ability to sustain a lengthy test; therefore, the researcher manually raised the levels. However, sometimes the student exhibited problems reaching the expected 80%, so the student would again ask for a level adjustment back to the original placement. At times, though, the student could perform at the higher level, and the student felt pleased and more confident.

Another adjustment the researcher made was in permitting the students to listen to music when they read. The retired reading specialist adamantly said they should not listen to music at all, and yet, as noted in the research journal: "I continually battled their headphone use, but I realized that if they wrote quality blogs and earned 80% on the Reading Plus readings, then I would permit them to listen to music." This policy, though, sometimes became problematic as some could listen and concentrate, and others could not. The researcher simply monitored their work quality and openly shared to the class why some students could listen to music while others could not.

The researcher also made alterations when explaining assignments. The log revealed sometimes students needed both oral and written instructions, and others needed repeated instructions. Students requested explanations, and the researcher placed instructions and outlines on GoogleDocs. One student felt confused about terminology since the Jane Schaffer methodology, mentioned in Chapter One, referred to "commentary" when the Toulmin method used "warrant" to connect the evidence with

the claim. Technology instructions proved challenging at times. The researcher noted in the log a "problem with pics . . . doesn't work on Androids . . . only iPads preferably: process . . . send to students' emails, open, select arrow, and then download . . . open download and save to desktop . . . open global issues and drag pic into document." At times, connectivity became challenging because many of the assignments had to be on an iPad or computer when the service went down. Then the researcher resorted to Plan B and encouraged students to engage in additional reading with their self-selected choice books. Although the researcher never lowered expectations, this viewpoint altered instruction at times. One example was when a student hastily wrote a blog and posted it; the researcher deleted the blog and explained to the student: "Last night I looked, and you had posted the entire article with no analysis. I deleted part of what you wrote but then put an outline on KDocs for blogs nine and ten that might help with constructing the argument." The student said, "Why did you do that" and then thanked the researcher when the student realized how much the outline and explanation helped with clarification**.** Just as reflection and modification help students develop their learning, McKinney and Sen (2012) claimed, "There is an established relationship between reflection and learning that has value for both students and teachers" (p. 116). The action research journal noted adjustments and modifications proved both beneficial for student learning and teacher effectiveness.

Student Emerging Themes

Through students' threads throughout their responses, 11 themes emerged. These themes support researchers' claims in the Literature Review Chapter Two that building confidence, transferring skills, building a reading community, giving quality feedback,

and teaching reading strategies within a GRR framework lead to critical thinking development (Austin, et al., 2008; Gelder, 2005; Katzev et al., 2009; Patesan, et al., 2014; Woodly, 2008; Zambo, 2009).

Confidence building. The first theme was confidence building the students experienced throughout their blog writing process. Seven specific comments connected with this concept. One representative sentence was as follows: "I will voice my opinion in the future when I [become] a sports writer on ESPN." This comment showed not only confidence, but also reflected the next theme: transfer.

Transferring. Students wrote nine threads about transferring their knowledge to other courses or their futures. One student wrote, the blogs will help in writing "English papers," and another student shared that in general, blogs lead to success.

Building critical thinking. Although a few students specifically wrote that critical thinking and analyzing helped their learning, students mentioned critical thinking improvement in 11 other threads; one student wrote, blog writing "helped my brain." Another student wrote in more detail about critical thinking: "I am still learning how to become a better critical thinker. It takes practice and helps you with other classes. [My] critical thinking skills are off the radar."

Receiving beneficial feedback. Throughout 10 threads, students revealed they valued the university students' feedback; one student wrote the university students "helped me with the comments and what they said to me."

Improving reading and comprehension. Eleven threads mentioned improved reading, and 17 students commented on writing development. On reading, a student wrote, "[my] reading skills improved." On the topic of writing, a student wrote,

> [Sometimes] my hands cramp like crazy when I write blogs, and I do get lazy at moments and sometimes I take a lot of breaks and go to the bathroom a lot in the middle, but sometimes everyone needs a break so the mind can refresh and that can make you write more intelligent things.

Increasing understanding. Seven threads centered on the blogs leading to students increasing their understanding in general. A student wrote, "I am better in class discussions because I understand more."

Improving description and details. In five threads, students mentioned having improvement in using description and details. A student shared, "I [now] pay attention to more details."

Feeling challenged. Three threads mentioned the difficulty of the writing the blogs; one student mentioned blog writing got easier; and three threads showed with effort and trying, the students succeed. A student wrote, the blogs "really challenged my brain." Another student wrote, the one who exited at semester: "Now I have a growth Mindset and . . . I can meet whatever goal I have in reading as long as I put 100% effort into it."

Learning new ideas. Three threads reflected the value of learning new ideas. A student commented, "Blogs are a cool thing to do in class in my point of view. I like reading the newspaper and watching the news and [blogs help] me learn new things and see what's going on the world and realize opportunities." One student said writing blogs got easier, while three others mentioned they got harder. One student wrote, "The first blog was easier, and then they got harder." Another student wrote that blogs were "frustrating [because they] involve too much thinking."

Learning through GRR. This researcher embedded the concept of GRR because at first the class read the same articles, then the class used models with strategies, and then students selected their own articles. One student captured this experience with the following assertion, "I think once I get the point of what we're suppose to do, I take off." Another student wrote, "I [now] know how to be independent and write a blog myself." Similarly, a student shared the following about writing blogs, "It helps me read a short passage and write a whole blog and pick out the main idea and really important details. It improved by writing and expanded my knowledge."

Teacher Emerging Theme

Through the GRR process and self-reflecting in an action research journal, this researcher learned the importance of adapting time-frames, engaging in purposeful communication with parents, staff, university students and liaison, and students. Adjusting to each student's learning needs and understanding the importance of respecting the whole child helped guide the students through the critical thinking development process. This process not only benefits students but teachers, as well. In the Review of the Literature in Chapter Two, McKinney and Sen (2012) stressed the importance of the "relationship between reflecting and learning that has value for both students and teachers" (p. 116). Adapting to students' individual learning needs helped this researcher to understand how to better alter methodology, adjust pacing, and adhere to students' socio-emotional needs through the year.

Summary

The TAF model showed that although the students did not reach the highest level of resolution, they did have arguable claims and substantial supporting evidence, which

slightly increased in quality as the year progressed. Data collected on tenth grade End of Course Exam (EOC) showed that 71% could master (at the proficient level) the Smarter Balanced type of EOC questions, and gains in reading from the Reading Plus program increased by 68.3%. Students noted the blogs helped them with higher order thinking as noted in Research Question 2, such as thinking, transfer, reading and writing, learning from feedback, understanding, gaining new ideas, increasing effort, assessing how hard or easy assignments are; and with building confidence. Although the 2.02 Grade Point Average was not impressive, almost all of the students reflected their reading had improved, especially with using the Reading Plus program. Through the researcher's log, evidence supported the investment the students had in improving reading by their coming on their own volition, working with the tutors, and taking ownership for their own learning. Although some obstacles prevented learning, such as behavioral issues, students for the most part wanted to work with their tutors and sought extra help in other content areas.

Chapter Five: Discussion and Reflection

Wagner (2011) emphasized to prepare students for the 21st century, teachers need to "develop strategies for teaching and assessing three C's: critical and creative thinking, communication, and collaboration in every class" (Slide 11). Therefore, this claim suggested the teachers constructed class frameworks and lessons so students had the opportunity to prepare for the world outside of the classroom after they graduated from high school. Subsequently this researcher aimed to conduct an Action Research study for the purpose of investigating whether setting a class framework with various components juxtaposed together positively impacted critical thinking for struggling high school readers who were two or more grade levels behind. The researcher explored the GRR framework and modeled strategies; encouraged student autonomy; built up a community of readers to communicate using blogs as a forum; designed lessons using intertextuality to promote higher level thinking; supported student choice; created goal setting and reflection questions; and used an online reading program. The researcher discovered in this study specific areas of strength within the reading design, emerging themes, and some inconsistent findings, especially in the TAF analysis method for measuring student blogs and critical thinking development over the course of one year.

The study's limitations included students moving in and out of the classroom through the course of the year and this researcher agreed after this year-long study, with Creswell (2003) who concluded human beings continually changed, brought their cultural influences, and reacted to those around them during the research process. This researcher found after reflecting on the action research journaling through the year, sometimes students' behavior, motivation, attitudes, and inconsistent work ethic may

have contributed to limitations on this researcher being able to fully isolate the factors that may have led to the students' critical thinking development. In addition to inconsistencies with some aspects of classroom lesson execution, the inability to isolate each area to evaluate its effectiveness interfered with drawing conclusions for each class component since they interlaced together. In addition, the teacher modified time frames and incorporated the university tutors; however, not all students desired to work with the tutors so this researcher could not adequately evaluate this aspect of the framework. Also each student had various other courses, such as history, science, and English where they read and critiqued texts in various contexts yet with differing approaches. The researcher saw a gap in the literature for Reading Plus research, which primarily came from the Reading Plus program websites versus peer-reviewed articles.

Summary of Findings and Reflections

This researcher uncovered several themes emerged from analysis of blogs, intertextuality readings that increased in complexity, reading strategies, and GRR. The reading specialist researcher who used the TAF analysis process noted that although the students did not progress to the highest level of critical thinking of *resolution*, they did offer solutions, the mid-range critical thinking category. On a 1–5 point scale, they all progressed in the quality of their opinions and claims, and provided evidence to support each argument using the teacher made blog evaluation tool that mirrored the CCSS. The students demonstrated an average ranging between proficient and advanced. The students' reading abilities wavered between two or more grade levels behind, and the researcher could not draw absolute conclusions except to suggest the Toulmin model provided a structure that did enhance critical thinking.

With respect to the blog prompts reflecting the Smarter Balanced test questions, and the use of the Cognitive Thinking Matrix tool, this researcher had evidence to support the types of scenarios, resources, and text examples that provided opportunities for students to demonstrate critical thinking. As the EOC mirrored the Smarter-Balanced test, 10 out of the 14 tenth graders achieved grade-level reading. These EOC English tests used grade level readings, and this researcher concluded students made learning gains within the reading program that contributed to their success.

As stated in Chapter Four, Kennison (2012) stressed the importance of reflective writing and ascertained "with foresight and planning, reflective writing may be an empowering strategy for facilitating students' thinking skills" (p. 306). One student explained how reading 10 books would help his reading improvement, and the tone in the response showed both confidence and excitement. Several students shared their goals of reaching grade level equivalent as they exited the reading class. A student shared the value of helping others read and plans to build reading into life after the school day ended. Student-written reflections and goal setting showed evidence of learning and the effectiveness of the classroom framework. Students' learning seemed to be related to enhancing critical thinking and taking ownership of their own learning. For example, a student wrote the following: "every article we wrote, you would have to think about what the article was about and how to tie it to today's world." Another student implied as learning did not come easily but claimed the individual responsibility: "I had to learn to branch off of the mistakes that I did my freshman year and had to build confidence to finally say okay I am a much better reader because I am so much stronger."

In addition, students commented on particular aspects of the program that worked well specifically related to goal setting, and critiqued other aspects of the program in relation to their own learning. With the online reading program, Reading Plus, which supported the concept that reading correlates with critical thinking, students showed improvement over the course of the year. As noted in the literature review, Smith (1988) surmised "Reading cannot be separated from thinking. Reading is a thought-full activity. There is no difference between reading and any other kind of thought" (p. 21). Therefore, since reading comprehension improved, this researcher made the assumption that critical thinking improved.

The action research journal gave insight into the complexity of the learning factors due to specific notations that highlighted student behaviors, teacher modifications with assignment lengths or changing pace, tutor comments, and anecdotal information that isolating each segment and its effects could not yield precise conclusions on individual components. The essential reflection included the realization of the importance of knowing each student and garnering individual student relationships resulted, at times, in individual students challenging themselves. The action research journal showed students saying, "this is too hard," and "why do you think we're an Honors' class; we're not." A pattern emerged that preconceived attitudes in believing the students could arrive at the highest level of improvement sometimes created a vital academic environment, but at other times resulted in students feeling frustrated and shutting down. Slowing down the pace sometimes became necessary, but keeping the highest expectations remained the priority. In addition, the 10 blogs with the scaffolding, although that part decreased in conjunction with the Reading Plus program, proved

arduous for students. The journal revealed the low class GPA resulting from students having other homework or outside commitments and the work required for the reading class could not always be completed in class. Inequality existed because some students had a parent advocate and support, while others were left to fend for themselves. This researcher reflected on perhaps limiting the number of blogs in the future.

Another particular challenge occurred with the school's drop schedule. Sometimes the researcher met with a class five times a week, and other times three or four. This scheduling aspect presented a timing challenge. The researcher and university liaison set the dates in advance to align with the university schedule, and this part was not flexible. Constructing blogs, even though some had due dates with weeks in between, resulted in the necessity of this researcher needing to make adjustments. Processes changed, such as shortening the process and/or asking the university students to respond to previous weeks' blog postings. In addition, to completely analyze the blog sequence, using lexile scores for the readings the teacher chose for the blogs could yield more accurate data to analyze since the reading levels, similar to the Reading Plus program, could be more precisely analyzed and measured. With the Toulmin model, the researcher could extend student analysis to include rebuttal and counterclaims, for example, and that may have further enhanced students' critical thinking.

Implications and Recommendations for Further Research

In the 2011-2012 school year at this same high school, this researcher used the concept of blogs and intertextual prompts with Honors tenth graders—students who opted into this English class because they wanted an extra challenge. In Canan's (2013) article, using this aspect of intertextual prompts proved successful: "Students

participating with a wider community about timely topics with intertextual prompts serve as the framework to prepare them for an active engagement into current events and to become the writers of the future" (p. 92). This example demonstrated the opportunity for all teachers to engage in action research using various aspects of this current study. Struggling readers do not differ in benefitting from effective reading and critical thinking; all readers just work on a continuum and develop at their own pace, potentially using the same methods.

Further research on high school students (struggling or advanced) using GRR; self-selected texts, blogs, Reading Plus (comprehension, vocabulary, fluency analyzed together or separately), self-reflections and goal setting, standardized testing frameworks, and reading strategies; may provide insight into students' critical thinking development. In addition, teachers could frame instruction using the Toulmin argument structure, recursiveness of reading and writing, the impact of interweaving various grade levels in one class, university reading collaborations, teacher self-monitoring, and engaging in self-reflection to design their own action research and/or even quantitative or mixed method research studies. In this way, researchers could examine and analyze each factor in greater depth versus blending these areas together. Other English teachers or content area teachers could focus on any one of these aspects to explore reading across the content areas. At the time of this writing, this course design serves as a model for the middle school and elementary schools in this study's school district as the teachers restructure their reading programs to serve their students' reading needs.

Conclusion

This researcher felt the urgency for students to develop their critical thinking skills to be reading for the demands of the 21st century jobs and for their own edification. Researchers and authors Friedman and Mendlebaum (2011) claimed, ”The only way we can compensate for all those lost jobs is by inventing new ones or taking old ones and teaching people to do them in new ways that add more value” (p. 147). This assertion exemplified the Chapter 1 definition of critical thinking.

For the purpose of this study, this researcher used the definition for this action research study: “critical thinking consists of seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth” (Willingham, 2007, p. 8). Therefore, to prepare students for these work place expectations, this researcher believed schools need to explore ways to increase students’ independence and critical thinking. The nature of incorporating, assimilating, and applying new knowledge requires multiple avenues and strategies, and this researcher reaffirmed the belief held prior to this research that simplistic approaches and linear analysis and thinking does not reflect this critical thinking process. Current educators have the challenge to explore and be flexible about structuring their classroom environments when the inter-connectivity on the global landscape has, according to Friedman and Mendlebaum (2011), led to the understanding that “average is officially over” (p. 142). This statement means educators need to set an urgency of high expectations, and each student needs to challenge himself/herself to go beyond

mediocrity to succeed in a 21st century environment. An "average" standing no longer exists.

Within the context of a global community, this researcher believes in the concept that America's Founding Fathers viewed the idea of democracy as the enhancement of both the individual and the community. This study aimed at examining an environment that celebrated original thought and individual advancement in developing critical thinking. As Walt Whitman stated in his 1871 essay *Democratic Vista's* that democracy's principles "properly train'd in sanest, highest freedom, may and must become a law, and series of laws, unto himself/[herself], surrounding and providing for, not only his own personal control, but all . . . relations to other individuals, and to the State" (para. 31). This quote suggested that although Whitman deemed individual achievement important in a democracy, he simultaneously saw the value in people interacting with each other and their obligation to improve society. This researcher believed the responsibility of each student was to improve his/her critical thinking within a community through reading about issues and literature from a broad spectrum of the human condition. Therefore, even though this democratic philosophy honored the individual voices, this researcher designed a classroom on the belief students did not learn in a vacuum but interacted with the world around them and to various texts for a multitude of purposes; a community of learners became essential, as that was the aim of democratic education.

This study contributes to the body of literature that examines how to improve critical thinking in a high school environment. The study's findings showed that numerous factors, such as GRR, Reading Plus, reading and vocabulary strategies, blogs, a

reading community partnership with university and struggling high school students, self-selected texts, Toulmin (1958) argumentation framework, blogs, and teacher and student self-reflection all interweave and result in students improving critical thinking. Nowhere in the literature does a study exist that blends these course components for students two or more grade levels behind in reading. The previously mentioned components do not work in isolation, but this researcher saw evidence with improved results from the state assessment, the Reading Plus online program, blog TAF analysis, an action research journal, and student self-reflections. Critical thinking is a necessary skill in the 21st century global community and rooted in the American democratic process. Based on insights from this study, further research on isolating and measuring the components of this course design might show how each of these interwoven concepts leads more specifically to helping struggling readers in a high school settings improve their critical thinking skills.

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Appendix A

Webb's Depth of Knowledge and Bloom's Taxonomy

Depth of Thinking (Webb) + Type of Thinking (Revised Bloom, 2001)	DOK Level 1 Recall & Reproduction	DOK Level 2 Basic Skills & Concepts	DOK Level 3 Strategic Thinking & Reasoning	DOK Level 4 Extended Thinking
Remember	- Recall, locate basic facts, definitions, details, events			
Understand	- Select appropriate words for use when intended meaning is clearly evident	- Specify, explain relationships - summarize – identify central ideas	- Explain, generalize, or connect ideas using supporting evidence (quote, text evidence, example…)	- Explain how concepts or ideas specifically relate to other content domains or concepts
Apply	- Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning	– Use context to identify word meanings - Obtain and interpret information using text features	- Use concepts to solve non-routine problems	- Devise an approach among many alternatives to research a novel problem
Analyze	- Identify the kind of information contained in a graphic, table, visual, etc.	– Compare literary elements, facts, terms, events – Analyze format, organization, & text structures	- Analyze or interpret author's craft (e.g., literary devices, viewpoint, or potential bias) to critique a text	– Analyze multiple sources or texts - Analyze complex/ abstract themes
Evaluate			– Cite evidence and develop a logical argument for conjectures based on one text or problem	- Evaluate relevancy, accuracy, & completeness of information across texts/ sources
Create	- Brainstorm ideas, concepts, problems, or perspectives related to a topic or concept	-Generate conjectures or hypotheses based on observations or prior knowledge and experience	-Develop a complex model for a given situation -Develop an alternative solution	-Synthesize information across multiple sources or texts -Articulate a new voice, alternate theme, new knowledge or perspective

Appendix B

TAF

Steps one and two: As stated in Weltzer-Ward, et al (2008): "**Five possible identifiers** (Dewey, 1998; Garrison et al., 2001; Henri, 1992) (p. 9) and "Identify the **main role** of the passage in the argument being made by the author" (p. 9)	**Step three**: "this role and the statements relationship to other statements in the discussion is identified with a sub-code. Each passage may be given only one identify code and one sub-code" (p. 9)	Step four: "…Assessing the quality of all statements identified as claim or evidence using a 1 to 5 rating, ranging from 1 indicating a statement which does not show critical thinking to a 5 showing strong critical thinking and integration into an argument (DeWever et al, 2006; Newman et al., 1995; Wichersham & Dooley, 2006).
"**Initiation** includes identification of a common question or problem and discussion to insure that question or problem is understood by the group" (p. 9)	"Questions pose a problem or question with the expectation of an answer within the context of the discussion (Fahy, 2005; Pena-Shaff & Nicholls, 2004). Those which elicit a single, specific answer are identified as Information. Those which elicit further discussion are identified as Discussion" (p. 9).	
"**Exploration** includes all discussion which expands upon the problem or question to support formation of a solution. Identification of appropriate assumptions to make, presentation of data relevant to the problem, and descriptions of relevant theories and facts" (p. 9	"**Claims** present an idea with the intention of furthering discussion. They may assert something new (Assertion), support another claim (Support), disagree with another claim (Disagreement), synthesize previous claims (Synthesis), or reply to an Information question (Reply) (Pena-Shaff & Nicholls, 2004; Toulmin, 1958; Zohar & Nemet, 2002)	
"**Solution** includes both positing an answer or solution to the question or	"**Evidence** provides specific details or information to support a claim…and may be	

problem and the initial explanation of that answer or solution" (p. 9)	a Quotation, a paraphrased Reference, a personal Experience of the discussion participant, an Opinion, a hypothetical or real Example, experimental Data, or a Theory which is generally accepted with the field (Fay, 2005; Toulmin, 1958) (p. 9)	
"**Judgment** includes all discussion where the answer or solution is debated, modified, or tested by the group" (p. 9	"**Relations** describe the links between claims or between a claim and evidence (Toulmin, 1958). No sub-code is applied" (p. 9).	
"**Resolution** occurs when the participants agree upon a final solution or answer" (p. 9)	"Other identifies passages that are not relevant to the discussion development. They may act in a voting nature such as "I agree" or "I don't like it" without further explanation (Scaffolding). Or, other passages may be totally unrelated showing saluations or discussing another topic (Social)	

Table 1: TAF Coding Example

Passage	Passage Code	Passage Subcode	Claim Rating	Evidence Reliability Rating	Evidence Relevence Rating
I would rank the goals of education in this order: #2 first,	claim	assertion	2		
because I believe, like Martha, that developing a child's self-esteem is extremely important	evidence	opinion		2	5
and also if a person is nurtured/encouraged/allowed to develop their own full, unique potential, that person is bound to make their mark as a productive, creative member of society.	evidence	opinion		2	5
And. I believe that person will be happier in the long term because they will believe that is possible to.achieve their own unique goal, whatever that may be.	evidence	opinion		2	5
The next order of importance for me would be #5,	claim	assertion	2		
and I don't accept the premise that it is utopia and will never happen.	claim	disagreement	2		
Each generation of young people can challenge the status quo and there are growing numbers of people of all generations who promote exactly those ideas of peace, harmony, equality and love.	evidence	opinion		2	4
For me, the rest of the goals would come as a matter of course if the priorities are #2 and #5.	claim	assertion	2		
In other words, if you know what your objectives are, the rest are methodologies to achieve those goals.	evidence	opinion		2	4

Appendix C

School District Permission for Study

From Assistant Superintendent of Curriculum and Instruction for Study School District School question addresses educational equity in the most meaningful and authentic sense, through high expectations and positive assumptions for your students. You might want to modify your description of the 10th grade EOC by removing the references to Smarter Balanced. I'm not sure SBAC will be directly linked to the EOCs, even though the tests will be representative of the ELA CCSS. (Heidi is the expert here, so I defer to her input).

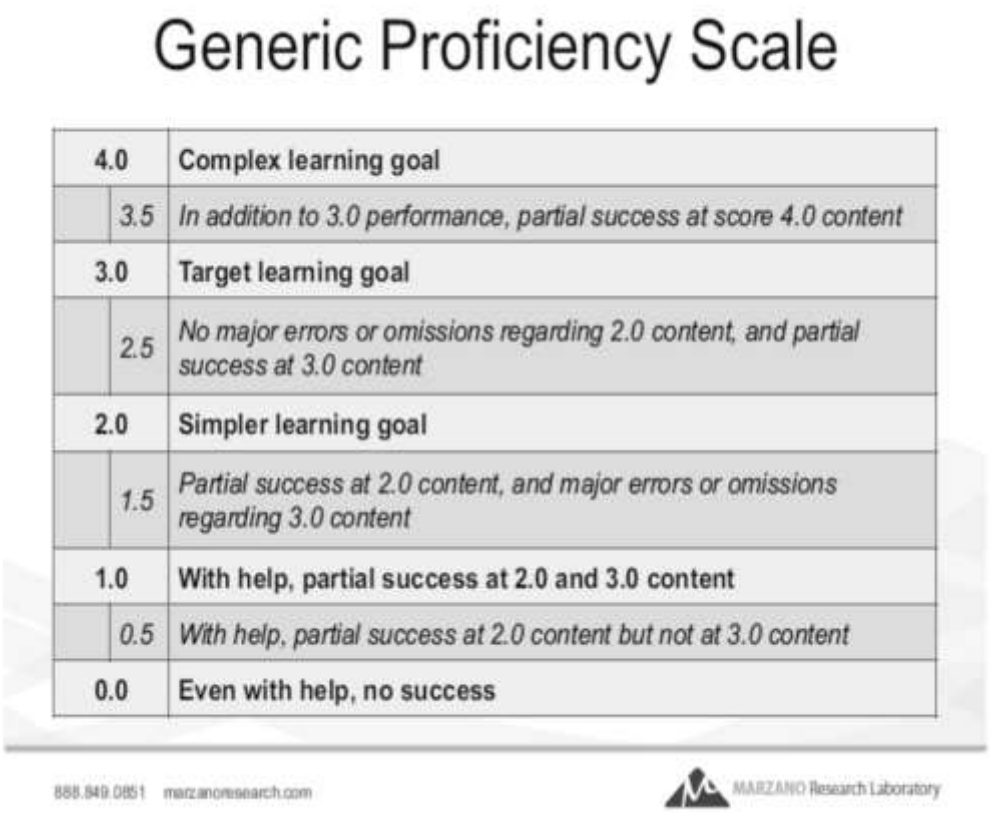
Thanks so much for sharing your work with us. I enthusiastically support your topic.

Chris

Sent from my iPhone

Appendix D

Marzano's Generic Proficiency Scale



Generic Proficiency Scale

4.0	**Complex learning goal**
3.5	*In addition to 3.0 performance, partial success at score 4.0 content*
3.0	**Target learning goal**
2.5	*No major errors or omissions regarding 2.0 content, and partial success at 3.0 content*
2.0	**Simpler learning goal**
1.5	*Partial success at 2.0 content, and major errors or omissions regarding 3.0 content*
1.0	**With help, partial success at 2.0 and 3.0 content**
0.5	*With help, partial success at 2.0 content but not at 3.0 content*
0.0	**Even with help, no success**

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Appendix E

This Researcher's Blog Rubric based on CCSS

The Reading Community Blog: 16 points Name_____ Blog Topic:

	Advanced	Proficient	Basic	Below Basic
Central idea: RI.9-10.2 Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	Demonstrates high-level understanding of central idea of whole text and premise and addresses both sides of issue.	Demonstrates understanding of central idea of whole text and premise, however, may not address both sides of the issue	Somewhat demonstrates understanding of central idea of whole text and premise	Lacks or demonstrates little understanding of central idea of whole text and premise
Evidence: RI.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Demonstrates high-level understanding of key evidence and relates to whole concept	Somewhat demonstrates understanding of key evidence and relates to whole concept	Superficially demonstrates understanding of key evidence and relates to whole concept	Lacks demonstration of understanding of key evidence and relates to whole concept
Evaluate claims: RI.9-10.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	Demonstrates high-level reasoning and logic to evaluate claims in the authors' arguments	Somewhat demonstrates high-level reasoning and logic to evaluate claims in the authors' arguments	Superficially demonstrates high-level reasoning and logic to evaluate claims in the authors' arguments	Lacks demonstration of high-level reasoning and logic to evaluate claims in the authors' arguments
Format: Ten lines without errors that make sense and connect to prompt. Posted by due date and contains two specific textual references	Demonstrates mastery of all format requirements with coherency	Somewhat demonstrates mastery of all format requirements with coherency	Superficially demonstrates mastery of all format requirements with coherency	Lacks demonstration of mastery of all format requirements with coherency

Appendix F

Assessment Sequence

Quarter 1	Quarter 2	Quarter 3	Quarter 4
Beginning of year: Benchmark #1 from Reading Plus	End of Quarter and semester Benchmark #2 Reading Plus		End of quarter and semester Benchmark #3Reading Plus
Fountas and Pinnel assessment and Informal Running Records	Informal Running Records and/or F & P if data shows they are near to completing the 8th grade reading comprehension level, the maximum level for F & P the district uses	Informal Running Records and/or F & P if data shows they are near to completing the 8th grade reading comprehension level, the maximum level for F & P the district uses	Informal Running Records and/or F & P if data shows they are near to completing the 8th grade reading comprehension level, the maximum level for F & P the district uses
Marzaono Generic Proficiency scale in connection to in class readings and reading strategies	Marzaono Generic Proficiency scale in connection to in class readings and reading strategies	Marzaono Generic Proficiency scale in connection to in class readings and reading strategies	Marzaono Generic Proficiency scale in connection to in class readings and reading strategies
Smarter Balanced Depth of Knowledge and Bloom's Taxonomy matrix in connection to in class readings and reading strategies	Smarter Balanced Depth of Knowledge and Bloom's Taxonomy matrix in connection to in class readings and reading strategies	Smarter Balanced Depth of Knowledge and Bloom's Taxonomy matrix in connection to in class readings and reading strategies	Smarter Balanced Depth of Knowledge and Bloom's Taxonomy matrix in connection to in class readings and reading strategies
	Integrated Critical Thinking Assessment in connection to the blogs	Integrated Critical Thinking Assessment in connection to the blogs	Integrated Critical Thinking Assessment in connection to the blogs
	Teacher made blog rubric	Teacher made blog rubric	Teacher made blog rubric

	Reflective essay with sample prompts of how their reading has developed over the semester, their strengths/weaknesses, reading goals, and analysis of the assignments and assessments		Reflective essay with sample prompts of how their reading has developed over the semester, their strengths/weaknesses, reading goals, and analysis of the assignments and assessments

Appendix G

TAF Creator's Agreement to Use Instrument

On Mar 30, 2014, at 9:03 PM, "Donna Canan" <Donna.Canan@StudySchoolDistrictschools.org> wrote:

Hi, attached, please find the draft of my prospectus for Lindenwood University EdD. dissertation. I'm only including the title, purpose, rationale, and research questions for this action research that I hope to conduct during the next school year. It is my hope that I can show the high level of critical thinking that my struggling readers engage in but also how they develop their critical thinking throughout the year.

Our professor of Capstone I says it's necessary to get your prior approval for this research.

Please let me know if you have any questions, concerns, or revision suggestions.

Also, thank you both so much for your guidance throughout this school year as I continually modify and readjust my lesson plans to meet the students' needs.

Sincerely,
Donna
Purpose and rationale.docx

Lisa Weltzer-Ward <lisa.ward@waldenu.edu> 1:08 PM (1 hour ago)

to me, Beate

Donna,

My thanks for your interest in using TAF. You are most welcome to utilize it, and I am happy to provide support if needed.

Best Regards,
Lisa Ward

From: Canan, Donna J. [mailto:djc963@lionmail.lindenwood.edu]
Sent: Sunday, July 20, 2014 7:29 PM
To: lisa.weltzer@ntu.edu; Beate Baltes; Laura Lynn
Subject: TAF permission request for doctoral dissertation

Vitae

During the school year, 2014-2015, when Donna conducted this action research study, she served as Reading Specialist. During the two years as Reading Specialist at Kirkwood High School, she taught the Reading Focus classes. Donna also served as the English Department Chair for five years and previously taught English high school and middle school classes in the district. Prior to her tenure in the district, Donna taught at two urban middle schools in Cincinnati, Ohio, one a magnet Paideia seventh and eighth grade school. In addition, she taught two years in an Ohio rural school district and one year in a suburban Ohio school district. Donna earned her undergraduate degree at Bowling Green State University in Ohio and a Master of Education degree at Xavier University in Ohio; became a Nationally Board Certified teacher and published two peer-reviewed articles in the *English Journal.* One article, she co-authored with Dr. Joanne Golden (2004) entitled, “Mirror, Mirror on the Wall": Readers' Reflections on Literature through Literary Theories.” The other article earned her the National Council of Teachers of English, Paul and Kate Farmer English Journal Writing Award, in 2014 entitled, “I Hear America Sing: Promoting Democracy through Literature,” published in 2013.