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Content Area Teachers' Perspectives and Practices in Reading Instruction in Grades 9-12

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Nedgra Abbs

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Walden University

2020

Abstract

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by

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MA, Sam Houston State University, 2009

BS, Sam Houston State University, 1989

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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March 2020

Abstract

A rural school district identified a problem among high school content classrooms of insufficient attention to instruction aimed at enabling students to comprehend content area text material. Concerns about attention to reading instruction in content classrooms are also evident on the national level. The purpose of this qualitative case study was to investigate the perspectives and reading instructional practices of secondary content area teachers in math, science, and history. The conceptual framework of self-efficacy guided the study, as the perspectives of the teachers revealed what motivated them to move beyond their pedagogical comfort zone to meet the needs all students. The research questions were focused on the perspectives of teachers toward providing reading instruction in content area classrooms, instructional strategies teachers viewed as supporting reading comprehension and approaches they identified for reducing the barriers to incorporating reading instruction. Data were collected from 4 purposefully selected teachers in Grades 9-12 through semistructured interviews and examination of lesson plans. Data analysis involved an inductive search of patterns and themes of teacher perspectives and instructional practices. The findings showed that the teachers wanted to advance their knowledge of content reading instruction through content specific professional development and continuous support from mentors. Results have the potential for positive social change through identifying professional development to assist teachers with improving reading comprehension within content area reading instruction.

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Dedication

This study is dedicated to my husband for the love, patience, and encouragement that you continuously showed at every phase of my doctoral journey. I love you. To my daughter and my mother, thank you, for being my biggest fans. To my late grandfather, Mr. Johnny George Nicholson (Big Daddy). Every time I thought I had nothing left to give, the memories of you gave me courage to stay the course. Last, but definitely most important are the blessings and mercy of my Lord and Savior Jesus Christ. Thank you, for being my redeemer from the beginning of this journey until the end.

I will bless the Lord at all times: his praise shall continually be in my mouth. My soul shall make her boast in the Lord: the humble shall hear thereof, and be glad. O magnify the Lord with me and let us exalt his name together.

Psalms 34:1-3

Acknowledgments

“You may encounter many defeats, but you must not be defeated. Please remember that your difficulties do not define you. They simply strengthen your ability to overcome.”

—Maya Angelou

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I would like to express sincere appreciation to Dr. Jessica Fuda-Daddio, my second committee member, and Dr. Michael Brunn, my University Research Reviewer for providing feedback to advance my efforts along the way. I am appreciative for the school district that allowed me to conduct research. Thank you to the participants who crafted time into their busy schedules to interview with me. It was not one separate entity that made this study possible, but the willingness of all to perform their part to make a whole.

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Section 1: The Problem

The Local Problem

A rural school district has identified a problem among high school content subject classrooms of insufficient attention to instruction aimed at enabling students to comprehend content area text material. The high school improvement plan included several areas of focus identified by the high school leadership team during the past several years. These areas of focus were determined from documentation developed through the work of administrative walkthrough teams during the 2016 school year, which included the district superintendent, assistant superintendent of teaching and learning, content coordinators, school principals, and the high school dean of instruction. These district and campus administrators conducted periodic classroom walkthroughs to examine delivery of instruction and student engagement. The purpose of the classroom visits was to investigate content area teachers' instructional practices and the type of reading instruction included in their instructional delivery.

The findings from the 2016 walkthrough revealed that instructional delivery was primarily teacher driven, lesson content focused on subject area factual material, and there was little discussion for clarity and reinforcement of concepts. Furthermore, the findings from these administrative walkthrough teams raised concerns about the reading instruction being provided in content areas, according to the dean of students. As administrative walkthroughs are conducted to provide a snapshot of classroom instructional practices and student engagement, the findings are used to engage teachers

in discussions and reflections about their teaching practices in order to identify immediate and future instructional goals.

The district improvement plan also noted several areas for improvements in curriculum, instruction, and accountability for the 2016 school year that included the need for administrators to examine weekly lesson plans for evidence of specific reading instructional strategies and to visit classrooms to observe how teachers deliver content area reading instruction in content specific disciplines. According to the dean of students, the teachers have informally reported difficulty with adhering to this lesson plan requirement because of the challenges they have incorporating reading strategies into their content matter instruction including time constraints, teacher resources, pressure to cover all content subject material for state tested subjects, and limited knowledge and experience with reading strategies.

As cited in the 2018 district improvement plan, campus administration must continue to recognize and support best instructional practices for teaching and learning in all content areas. For the 2018 school year, assistant principals continued classroom walkthroughs throughout the district and participated in professional development sessions conducted by district coordinators on instructional coaching to increase their knowledge of content area instructional best practices. As a prerequisite to mandated formal evaluations, assistant principals added administrative coaching sessions after walkthroughs for individual teachers to discuss delivery of content instruction and student achievement.

Concerns about attention to literacy instruction in content classrooms are also evident on a national level. Two major literacy organizations in the United States have expressed this concern in position statements (International Reading Association, 2012; National Council of Teachers of English, 2006). The International Literacy Association (previously International Reading Association) noted in the 2012 revised statement on adolescent literacy that adolescents need teachers who use multiple strategies to deliver literacy instruction, demonstrate the function of literacy in all academic disciplines, and use authentic reading materials that include print and non-print sources. The National Council of Teachers of English noted in the 2006 statement that all teachers should address literacy in all academic disciplines and secondary teachers across all disciplines must meet the literacy needs that challenge adolescent students.

Researchers have also found several characteristics of literacy instruction in secondary content classrooms that may need improvement. For example, Orr, Kukner, and Timmons (2014) found that teachers supported the idea of integrating reading strategies in math and science but were inconsistent in implementing these strategies as a regular part of their teaching practices because the teachers needed additional training. Similarly, Goldman (2012) and McCully and Osman (2015) found that secondary teachers focused on teaching content with little emphasis on reading instruction in their instructional practice. These issues with instruction are problematic for incorporating reading instruction that enables students to comprehend content area text material. The challenges perceived by content area high school teachers to providing this instruction led

to the purpose of this study on content area teachers' perceptions and practices in reading instruction in Grades 9-12.

Rationale

To meet high school graduation requirements, to be prepared for college and career readiness expectations, and ultimately to be productive citizens, students must be able to read and comprehend informational text (Wexler, Reed, Mitchell, Doyle, & Clancy, 2015). The Common Core State Standards and the Texas Essential Knowledge and Skills standards require that students are able to read, comprehend, and apply information from text from multiple genres (National Governors Association Center for Best Practices and Council of Chief State Officers, 2010). Despite the importance of reading instruction that enables students to comprehend expository text, administrative walkthroughs by campus and district administrators at the local high school revealed infrequent instruction aimed at supporting reading comprehension in content-specific subjects. In addition, a significant amount of the text was read aloud by classroom teachers.

It has been suggested that many teachers feel they lack knowledge to effectively teach content area reading (e.g., Giles, Wang, Smith, & Johnson, 2013). The dean of students reported that teachers at the local high school have informally acknowledged difficulty in incorporating reading instruction into their content area instruction. This study could offer insights into the gap in practice in reading instruction of high school math, science, and history teachers by exploring the reasons they do or do not include reading instruction into their content area instruction. These insights could inform school

administrators about appropriate professional development and other assistance that might reduce the barriers to incorporating reading instruction perceived by high school content area teachers within the local setting and broader educational settings.

The purpose of this study was to investigate the perceptions of high school content area teachers about incorporating reading instruction in content areas and the types of reading instructional practices they use. Therefore, this study may enhance content area reading instruction locally and informing instructional practices at the broader level. This study may also assist teachers in addressing the reading instructional needs of all secondary level students.

Definition of Terms

Content area reading: The reading that a person needs to understand the literature in a subject area. Content area reading instruction assists learners in better understanding what they read in a specific content course (Ulusoy & Dedeoglu, 2011).

Expository text structures: The five patterns in expository text structures include description, sequence, compare and contrast, cause and effect, and problem-solving (Stevens, 2014). Awareness of expository text structure is considered important to reading comprehension of informational material (Schwartz, Mendoza, & Meyer, 2017).

Fluency: The ability to read text quickly with accuracy and meaningful expression (Schirmer, 2010).

Self-efficacy: A person's belief in his or her ability to succeed in a particular situation (Bandura, 1977).

Vocabulary knowledge: Familiar words a learner understands and is able to communicate effectively (Ma & Lin, 2015). Vocabulary knowledge is considered important to reading comprehension (Solis, Scammacca, & Roberts, 2017).

Word decoding: The ability to apply letter-sound relationships to identify words in print. Word decoding involves the work of learners when figuring out unfamiliar words in text (Serravallo, 2014).

Significance of the Study

Given the importance of being able to read grade-level subject matter text and the concern with reading instruction offered within content area classrooms (Collin, 2014; Ness, 2016), it is crucial to understand the influence of teachers' self-efficacy toward the obstacles they believe impedes their ability to implement reading instructional practices within content classrooms. This study may contribute to addressing the gap in practice about reading instruction within secondary content classrooms. I strove to do this by exploring the perspectives of high school teachers toward providing instruction that enable students to be proficient readers of expository text and other material required for subject matter understanding in high school. Findings point to approaches that increase the incorporation of reading instruction within high school content area classrooms. The project deliverable that will make an original contribution to the local setting is professional development focusing on reading instructional strategies that high school teachers can effectively incorporate into content area instruction while maintaining quality teaching and learning of subject specific content.

Research Questions

The purpose of this qualitative case study was to investigate the perspectives of high school content area teachers about incorporating reading instruction in content areas and the types of reading instructional practices they use. The following questions guided the collection and analysis of data:

RQ 1: What are the perspectives of history, math, and science teachers concerning their ability to provide reading instruction within content area classroom of students in Grades 9-12?

RQ 2: What approaches are identified by high school teachers of history, math, and science for reducing the barriers to incorporating reading instruction into their content area pedagogy?

RQ 3: What reading instructional practices do Grade 9-12 history, math and science teachers' view as supporting effective reading instruction to enhance reading comprehension?

Review of the Literature

For exploring the literature pertinent to the topic of reading instruction within content area instruction, the following databases were examined: Education Research Complete, Science Direct, Google Scholar, Educational Resources Information Center (ERIC), and ProQuest. Search terms included *content area teachers*, *content area reading*, *reading strategies*, *teacher perceptions*, *secondary teachers*, *reading comprehension*, *expository text*, *struggling readers*, *disciplinary literacy*, and *adolescent literacy*. In addition, sources were identified through a manual examination of the

following journals: *Current Issues in Education*, *Theory and Practice in Language Studies*, *Journal of Content Area Reading*, *Journal of Education and Training*, *International Journal of Science and Mathematics*, and *Procedia-Social and Behavioral Sciences*. References from pertinent studies also provided additional sources. The 31 studies in the literature review met the criteria of being reports of primary research, peer-reviewed, and published within the past 5 years. Additional primary sources were used for the conceptual framework and for providing current data pertinent to the study.

Conceptual Framework

The conceptual framework underlying this study is self-efficacy (Bandura, 1977), which describes a person's belief in his or her ability to succeed in a situation. According to Bandura (1977), there are four constructs in the theory of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological and emotional information. Mastery experiences involve prior performance accomplishments in something similar to the new behavior. Vicarious experiences involve learning by watching successful performance by someone similar to oneself. Verbal persuasion involves encouragement by others to carry out the new behavior. Physiological and emotional information involves reactions to the possibility of undertaking the new behavior. Bandura further suggested that teachers with a high self-efficacy have emotions and ambition that intrinsically motivate them to move beyond their pedagogical comfort zone to meet the needs all students. Two decades after developing the theory, Bandura (1997) posited that teachers who held a high level of self-efficacy were able to implement

effective teaching practices and methods in order to help their students to achieve regardless of negative personal, and other life-extenuating circumstances.

Two recent studies highlight the role of self-efficacy in instructional practices. As with the current study, both involved explorations of teachers' beliefs in their ability to incorporate instructional approaches that they viewed as challenging within their current teaching responsibilities. Abernathy-Dyer, Ortlieb, and Cheek (2013) explored issues that change teachers' instructional practices in the classroom and issues that influence and hinder improvement of instruction and found that quality instruction and teachers' willingness to implement the reading program with fidelity was important in student achievement. Additionally, Polkinghorne and Arnett-Harwick (2014) designed a descriptive study to determine family and consumer sciences (FACS) teacher educators' perceptions on the integration of reading skill instruction in secondary FACS courses. Results revealed that most of the FACS teacher educators had positive perceptions for integrating reading skills but did not feel they should assume the responsibility for teaching the integration of reading strategies to teachers and teacher candidates. Teachers did not believe they were qualified to incorporate reading skills into their content because they felt deficient in their ability to provide explicit reading instruction (Polkinghorne & Arnett-Harwick, 2014).

As highlighted by the Abernathy-Dyer et al. (2013) and Polkinghorne and Arnett-Harwick (2014), individual attitude and belief of personal instructional ability is considered a factor in teacher effectiveness when implementing instructional practices conducive to student achievement. The framework of self-efficacy underlies this study

because the perspectives of the teachers can disclose what motivates them to move past their pedagogical comfort zones as a result of prior successful performance with similar pedagogies, learning by observing others' successful performance, encouragement to carry out the new practice, and the physical and emotional reaction to the possibility of undertaking new instructional approaches that will meet the needs of all learners.

Review of the Broader Problem

In the following discussion of the literature, I analyze the studies most pertinent to the topic, provide a synthesis of key findings from these studies, and discuss the methodological considerations that emerged from the body of research literature. Analysis of the recent research on the topic of reading instruction within content area classrooms revealed several patterns in the body of literature. These patterns include perceptions about providing reading instruction by content teachers and research on strategies for instruction to improve the reading ability of students to read expository text within content instruction.

Perceptions of reading instruction within content area classrooms. Secondary content area teachers are faced with balancing the demands of content area subject expectations and meeting the literacy needs of students to enhance their reading comprehension of required text (McCully & Osman, 2015). Research on the perceptions of reading instruction by secondary teachers encompasses the beliefs and practices of preservice and veteran teachers.

Preservice teachers. Perceptions of incorporating reading strategies into content instruction begin in teacher education programs and influence attitudes and skills during

preservice educational experiences (Sewell, 2013). But several studies, mostly qualitative, have shown the issues encountered by preservice teachers in developing belief in their ability to deliver instruction needed by all students. Bennett and Hart (2014) were interested in how 14 preservice teachers who were currently enrolled in a cross-disciplinary content literacy course develop disciplinary reading pedagogy. Findings revealed an inconsistency between the pre-service teachers' literacy beliefs and their actual use of literacy instructional practices in the classroom (Bennett & Hart, 2014). Additionally, Colwell and Enderson (2016) explored the reasons for perceptions of math literacy among preservice teachers who had completed a content area reading and writing course and were currently enrolled in a secondary math methods course. The preservice teachers felt that vocabulary was important for math instruction but cited barriers such as coursework not supporting their knowledge of math literacy. The most significant concern from these preservice teachers was their lack of knowledge and experience to apply the reading strategies introduced in the course (Colwell & Enderson, 2016).

Unlike these studies in which the perceptions of preservice teachers were explored while they were enrolled in coursework, Orr et al. (2014) examined how six secondary mathematics and science pre-service teachers planned to integrate literacy practices in their teaching of secondary mathematics and science after completing a course in content area literacy. Results showed that these preservice teachers supported integrating reading strategies into their content area and experienced growing awareness about how reading strategies can enhance student learning in their specific subject areas.

However, they reported needing more instruction on how to consistently implement the strategies as a regular part of their practices (Orr et al., 2014).

Quantitative research has complemented results from the qualitative studies about the attitudes of content area preservice education teachers concerning the implementation of reading strategies in content lessons. For example, Warren-Kring and Warren (2013) indicated that through teaching experiences involved in tutoring adolescent students, preservice teachers demonstrated a significant change in attitude toward implementing reading strategies in content specific subject areas.

Content classroom teachers. Given findings on the perceptions of preservice teachers about their ability and attitude toward providing reading instruction within content instruction, it was important to determine whether the research pointed to parallels with experienced content teachers to address the central issue of this study—perceptions regarding teaching content area reading and their ability to teach their students the skills to read required content material. The research presented here is relevant in identifying what is already known about the problem of literacy instruction by content teachers. Several studies offer explication about the role of self-efficacy in veteran teachers' willingness and ability to incorporate reading instruction into content area teaching.

As with studies involving preservice teachers, methodological approaches involved predominantly qualitative designs in which the researchers explored the reasons expressed by veteran content teachers for teaching or not teaching reading during content instruction. Participants in the qualitative studies reflected various content areas including

math, science, and social studies as well as teachers at the elementary level who were responsible for all content instruction. Thacker, Lee, and Friedman (2016) examined the extent to which 45 middle and secondary social studies teachers incorporated instructional strategies suggested by the College Career and Civic Life Framework for Social Studies State Standards, finding that most teachers were supportive but reported challenges in using questioning techniques that promote methods of inquiry.

Alternatively, Moreau (2014) explored the perceptions of 34 middle school teachers, who were all certified to teach multiple content subjects, about their ability and responsibility for teaching struggling readers. Moreau found that generalist teachers reported needing more education about classroom strategies and practices for addressing reading difficulties.

The research involving quantitative designs involved a similar focus as the qualitative designs. Based on data from a Likert-scale questionnaire that was designed to measure attitudes toward teaching reading in content classrooms, Hong-Nam and Szabo (2017) found that the teachers' attitudes changed about the importance of intentionally incorporating content area reading strategies into their teaching practices. This finding is similar to results from the research with preservice teachers that through coursework, teachers develop a positive disposition toward incorporating reading instruction into content instruction. Çakıcı (2017) was also interested in teachers' beliefs and practices about the use of reading strategies during content instruction. Çakıcı found that 44 English-as-a-foreign-language (EFL) teachers of high school students had positive beliefs

toward the use of reading strategies and favored pre-reading and during-reading strategies.

Synthesis of key findings. The research on teachers' perceptions of reading instruction within content area classrooms indicates that though reading instructional strategies have a positive effect on reading comprehension and student content learning, several issues influence teachers' practices for incorporating reading instruction into their content instruction (Çakıcı, 2017; Hong-Nam & Szabo, 2017; Warren-Kring & Warren, 2013). Preservice and inservice teachers believe that knowledge of instructional strategies for content area reading instruction are important to improve student achievement but need more instruction on how to implement content reading instructional strategies (Bennett & Hart, 2014; Colwell & Enderson, 2016; Orr, 2014; Moreau, 2014; Thacker et al., 2016). However, the research does not offer findings on the reading instructional strategies that teachers' currently use or the kinds of support that would enable them to implement reading instructional strategies across content areas.

Reading instruction within content instruction. Research on the reading strategies used in content area instruction include studies of reading incorporated in content instruction and investigations of skills and strategies for content reading instruction. These studies offer examples of effective instructional approaches for teaching students to comprehend content area text material, including a relatively new approach referred to as disciplinary literacy.

Incorporation of reading instruction in content instruction. Several studies have involved investigations of strategies and practices for incorporating reading instruction

within content instruction. McCulley and Osman (2015) explored the effects of reading instruction in Grades 6-12 social studies classrooms on students' academic content learning and reading comprehension. Findings from their meta-analysis of 12 experimental research studies showed that constant implementation of reading instructional practices assisted students' comprehension of expository text. Similarly, Gaston, Martinez, and Martin (2016) were interested in the effects of instruction in reading strategies on academic achievement as well as the effects of instruction on motivation and engagement. Based on data from a pre-post unit test, student motivation questionnaire, and student engagement checklist, they found the group taught reading strategies showed significantly higher student achievement, a finding similar to the McCulley and Osman study. However, Gaston et al. (2016) also found significantly higher motivation and engagement when reading strategies were a part of the content instruction.

In addition to research focused on the relationship between reading instruction and student achievement, researchers have investigated the variety and frequency of text that teachers use in their lessons and the variety and frequency of reading instructional practices that they used to support teaching and learning. Wexler et al., (2015) conducted classroom observations and semistructured interviews with 10 high school science teachers over 3 months. Their findings showed that the teachers rarely used vocabulary and comprehension strategies with expository text. In addition, they found that though the teachers supported the integration of text and reading instructional practices, they

perceived a wide range of barriers to implementing the instructional strategies (Wexler et al., 2015).

Instruction in reading skills within content instruction. Another line of research inquiry on improving content area reading instruction has focused on reading skills important to the comprehension of expository text. Though these skills are fundamental to reading all types of text, the authors of these studies have explored the particular challenges involved in applying these skills when reading expository text.

Fluency and decoding. Although many secondary educators believe that when students enter secondary schools, they should be competent in decoding words quickly and accurately, the lack of proficiency in reading fluency and decoding affects comprehension of expository text as well as narrative text (Paige, Rasinski, Magpuri-Lavell, & Smith, 2014). Teaching phonics and word study may not be practical in secondary classrooms, but it is suggested that teachers can emphasize word study strategies to increase fluency and strengthen reading comprehension (Stover, O’Rear, & Morris, 2015).

Two recent studies show the importance of fluency in comprehending expository text. In a recent study of the role of reading fluency on the comprehension of expository text, Yildirim, Rasinski, and Kaya (2017) examined the relationship between reading fluency, word recognition automaticity, prosody, and comprehension. They found that increases in reading fluency correlated with increased levels of reading comprehension on expository text among the 100 participants at each grade level between 4-8 who were

attending school in Turkey. The authors concluded that fluency is important to all text types and genres.

Additionally, Sukhram and Monda-Amaya (2017) examined the influence of fluency instruction on comprehension by employing an experimental design with 60 students identified as struggling readers who were in Grade 7. The fluency strategy included one phase of the repeated reading strategy and another phase of the repeated reading strategy with corrective feedback. The authors found that both types of repeated reading instruction improved comprehension of expository text.

Vocabulary knowledge. Students often struggle with expository text because of the demands involved in understanding the specialized vocabulary and abstract concepts in expository texts (Welie, Schooner, Kuiken, & van den Bergh, 2016). Two recent studies illustrate the effectiveness of various strategies for improving the ability of students to learn new content vocabulary and apply their knowledge of the vocabulary for comprehending expository text. In one study of a vocabulary learning intervention, Craig, Ehri, and Hart (2017) examined the impact of strategy instruction, definitions instruction, and both strategy and definitions instruction on the reading comprehension of 38 community college students. The participants in the strategy instruction group were taught to use contextual, morphological, and syntactical cues to derive the meanings of vocabulary words in an expository passage. The participants in the definitions instruction group were taught to apply definitions they had been provided in advance of reading the expository passage. The participants in the combined group used both strategies and a control group received no vocabulary instruction. The authors found that the students in

all groups demonstrated improved comprehension in all conditions except the control group.

Solis et al. (2017) also conducted an experimental study to investigate the effectiveness of a vocabulary learning intervention though their sample was with fourth graders who had been diagnosed with low reading comprehension. The authors used a multi-component intervention involving vocabulary instruction, text-based reading, and self-regulation supports. Similar to the findings of the Craigo et al. (2017) study, results showed that the students in the intervention group showed significantly greater improvement in vocabulary and reading comprehension compared to the control group after the vocabulary intervention.

Text structures. Teaching expository text structures is intended to assist students in forming mental pictures and organizing their thoughts to understand the author's intended message within the text (Hebert, 2014). The importance of the topic is highlighted by the meta-analysis conducted by Pyle et al. (2017) in which they found few studies at the secondary grade level, the importance of expository text in secondary curriculum, and the expectation that students will be taught to comprehend expository text in standards such as the Common Core State Standards Initiative (n.d.).

Two studies focused on the influence of instruction on expository text structures with English language learners. The participants in the Zarrati, Nambiar, and Maasum, (2014) study were 170 EFL students and those in the Schwartz et al. (2017) were 48 second language learners of English. The students who received instruction on expository text structures in the Zarrati et al. study (2014) showed significantly better

comprehension than comparison students. Similarly, the students in the Schwartz et al. (2017) study showed significant improvement in their ability to recall information from text in both their first and second languages. Taken together, results offer promising evidence for the benefits of teaching expository text structures on reading comprehension.

Instruction in reading comprehension strategies within content instruction. A third line of research inquiry on improving content area reading instruction has focused on instruction in specific strategies designed to improve comprehension of expository text. The strategies most often investigated in the recent research literature include think-aloud, graphic organizers, and reciprocal teaching.

Think-aloud. The think-aloud reading strategy was developed by Davey (1983) as a teacher modeling technique that shows students how skilled readers create meaning from text during reading so that students learn to reflect on their own comprehension as they read. Several studies have involved the use of think-aloud in content reading instruction.

Bernadowski (2016) explored the influence of the think-aloud reading comprehension strategy on the ability of 18 eighth-grade at-risk students to understand math word problems. Data collection in this qualitative case study involved classroom observations, students' math journals, students' pre- and post-reflective journals, and interviews with the teacher. Results indicated that the students improved in writing answers to math problems and developed a stronger belief in their abilities.

Two researchers used quantitative quasi-experimental designs to explore the effectiveness of think-aloud in improving comprehension. In Jackson's study (2016), two classrooms received science instruction using the district's science curriculum; however, instruction for the experimental classroom also incorporated the think-aloud strategy. Yusuf (2015) also assigned students to experimental and control groups but used an interactive instruction approach in which think-aloud was one of several components that also included collaboration, questioning, and teacher feedback. Based on a pre- and post-test reading assessment using a science text at the students' independent reading level, a think-aloud task, and a student observation checklist, Jackson (2016) found that comprehension of science content increased when instruction included the think-aloud strategy. Yusuf (2015) also found that students improved in their ability to comprehend informative text though unlike other studies involving read-aloud, it is not possible to separate the influence of think-aloud from the other components of interactive instruction on the results.

Graphic organizers. Another strategy designed to improve comprehension of expository text involves the use of graphic organizers. Graphic organizers are designed to be used before, during, and after instruction to assist students in creating graphic images of information that show the relationships among ideas in the text for improving comprehension (Cummins, Kimbell-Lopez, & Manning, 2015).

One recent study illustrates the use of graphic organizers with students who struggle with reading content area material. In a quasi-experimental study, Rahim, Yusuf, and Dzulkafly (2017) investigated the use of graphic organizers as pictorial models to

assist students of varied English proficiency and academic abilities with their comprehension skills. Students were assigned to two control groups and two experimental groups. Before and after the intervention, the students completed a 15-question survey about how they approach a reading task and a reading comprehension test. During the study, the experimental groups were instructed with various graphic organizers prior to reading content text. Results showed that students in the control group showed minimal reading comprehension gains compared to the students in the experimental group who received instruction in using graphic organizers.

Reciprocal teaching. Several studies have involved investigation of the reciprocal teaching instructional model and approaches that include individual components of reciprocal teaching. Pilten (2016) conducted a mixed method qualitative and experimental random control trial study to investigate the effects of reciprocal teaching in comprehending expository text among 54 students at an upper elementary grade level. Mistar, Zuhairi, and Yanti (2016) were also interested in the influence of reciprocal teaching on comprehension but their sample was 71 EFL students attending a vocational high school. The qualitative semistructured interview data in the Pilten (2016) study revealed that the reciprocal teaching strategies promoting interaction in the classroom were viewed positively by the students. Findings from quantitative pre-post data analysis in both studies showed significantly better comprehension of expository text among the students whose instruction included the reciprocal teaching model. Results from these studies are consonant in offering evidence that reciprocal teaching is a promising strategy for improving the comprehension of expository text.

One study involved the investigation of one component of reciprocal teaching. Tarchi (2015) studied the effect of prior knowledge activation on the reading comprehension of expository text among 166 secondary students. All students received regular reading instruction and used the same expository reading materials. Instruction for the experimental group students also included the reciprocal teaching reading strategy for activating prior knowledge. Results showed that students in both groups showed improvement in reading comprehension of expository text but the experimental group showed significantly better metacognition and inferencing skills.

Instruction in disciplinary literacy. Disciplinary literacy involves teaching students the specialized knowledge of how each academic discipline integrates reading, writing, thinking, and understanding in the discipline (Shanahan & Shanahan, 2017). Whereas content literacy instruction involves teaching the skills that enable students to comprehend subject matter text material, disciplinary literacy instruction emphasizes the tools that are used to communicate in the discipline (Shanahan & Shanahan, 2012).

Several researchers examined approaches for assisting teachers to incorporate disciplinary literacy through professional development. One approach involved an investigation by a team of researchers on the effectiveness of professional learning communities among high school teachers (Charner-Laird, Ippolito, & Dobbs, 2016; Dobbs, Ippolito, & Charner-Laird, 2016). In the Charner-Laird et al. (2016) study, participants were teachers of English language arts, social studies, and world languages who were grouped into three teams of six each. In the Dobbs et al. (2016) study, participants were six social studies teachers who worked together in a professional

learning community. In both studies, the teachers participated in a week long summer institute and full-day workshops each semester to learn about disciplinary literacy and met weekly with their respective professional learning communities during the school year to assist one another in implementing disciplinary literacy in their respective classrooms. A different approach to professional development was taken by Graham, Kerkhoff, and Spires (2017) who explored the effectiveness of a 6-week course in assisting eight middle school teachers of English language arts, science, social studies, and math in incorporating disciplinary literacy strategies. All of these studies utilized qualitative case study design and included interviews, observations, and artifacts such as lesson plans and meeting notes as data sources. Findings showed that the high school and middle school teachers of various content areas incorporated disciplinary literacy strategies into their instruction and that working together in professional learning communities guided by a team leader facilitated their learning of new strategies. Alternatively, the teachers reported that though they felt more confident in incorporating disciplinary literacy, they felt continued tension between responsibility for teaching content and teaching literacy within content.

Approaches other than professional development within professional learning communities have shown similar results with the Premise-Reasoning-Outcome strategy with two physics and two chemistry teachers (Rappa & Tang, 2018), Adaptive Primary Literature method with 68 grade K-12 teachers (Koomen, Weaver, Blair, & Oberhauser, 2016), and interaction of one literacy coach with three teachers, one each in math, social studies, and English language arts (Di Domenico, Elish-Piper, Manderino, & L'Allier,

2018). The Premise-Reasoning-Outcome strategy involves changes in classroom discourse to incorporate the characteristics of disciplinary literacy so that students learn the specific ways of talking, reading, writing, and thinking in the discipline. For the Adaptive Primary Literature strategy, the teacher creates text material for science reading that matches the students' cognitive and comprehension level while maintaining the characteristics of science text structure. The adapted texts are then used by the teachers for supporting classroom discourse and disciplinary literacy in the science classroom. The literacy coach in the Di Domenico et al. (2018) study used an inquiry-oriented stance with the teachers as they implemented disciplinary literacy in their content teaching. Data sources for these qualitative studies varied from classroom observations for the Rappa and Tang (2018) ethnographic study to notes from weekly collaboration sessions and artifacts from the teachers' instruction for the Di Domenico et al. (2018) case study, and interviews and adapted reading material for the Koomen et al. (2016) case study. All of these approaches were effective in changing the classroom discourse patterns to reflect the kinds of reading writing, talking, and thinking that are reflective of the discipline but that teachers' ability to incorporate disciplinary literacy evolved over time.

Disciplinary literacy is a relatively new approach for all students and the benefit to secondary students with reading difficulties has not yet been determined. Learned (2018) addressed this gap in research with a qualitative study on how to effectively engage struggling readers in disciplinary literacy. Participants included three students identified as struggling readers in a Grade 9 history class and their teacher. Based on analysis of observations, interviews, and artifacts that included lesson plans, instructional

texts, and student work, Learned found that disciplinary literacy encouraged the students to comprehend the historical texts, compare historical perspectives, and interpret historical, social, and cultural events. Learned's results indicate that disciplinary literacy can meet the needs of learners with varying reading abilities.

Synthesis of key findings. Review of the research literature on content area reading instruction indicates that consistent incorporation of strategies and skills for reading expository text can improve students' comprehension (McCulley & Osman, 2015). Activating prior knowledge and reciprocal teaching have shown positive results in increasing critical thinking and comprehension of factual information among students in core and vocational high school classes (Mistar et al.; 2016 Pilten, 2016; Tarchi, 2015). Another reading strategy shown to have a positive effect on comprehension of expository text is the think-aloud strategy, with studies showing effectiveness for students in early elementary through high school grade levels (Bernadowski, 2016). Research on several other strategies have had more equivocal results including the use of graphic organizers, teaching expository text structures, and vocabulary instruction with adolescent students (Kimbell-Lopez & Manning, 2015; Rahim et al., 2017; Zarrati et al., 2014). Disciplinary literacy has been found to be effective in promoting reading, writing, speaking, and thinking about subject matter in ways that reflect the discourse among those in the discipline (Charner et al., 2016; Dobb et al., 2016; Graham et al., 2017). A potential issue that has not yet been addressed is the difficulty of incorporating reading instructional strategies into content specific instruction and approaches that might diminish this barrier for high school subject matter teachers.

Methodological considerations. Findings from the research literature on content area reading instruction offer evidence of various effective strategies. However, studies aimed at scaling up the use of these strategies to larger groups of students across a range of educational settings and grade levels is lacking. The studies were conducted most frequently in elementary and middle school settings. Methodologies were a mix of quantitative experimental designs and qualitative case studies and ethnography that were used to investigate instructional practices and few explore the perceptions of teachers about issues that made it difficult for them to incorporate reading instruction into their content instruction. Investigations of barriers to providing effective reading instruction of expository text within content instruction is a gap in the research literature about the practice of reading instruction within content area instruction and points to the need for studies on this problem.

Implications

An instrument for social change involves building on the knowledge and strength of what is already known and influencing people to want to make a positive social change for the betterment of future generations. This study will contribute to positive social change by providing key stakeholders in the district insight on how to increase the level of support for classroom teachers through job-embedded professional development in professional learning community meetings and instructional planning sessions. Findings from the study will inform professional development sessions for content specific subjects and interdisciplinary studies. To assist in providing teachers with quality resources, administrators can take stock of resources available to teachers and what

additional materials need to be purchased to enhance reading instruction in content area classrooms.

Summary

The purpose of this qualitative case study was to investigate the perspectives of history, math and science teachers toward providing reading instruction in content area classrooms, the instructional strategies that the teachers view as supporting reading comprehension, and what approaches could reduce the barriers to incorporating reading instruction. The conceptual framework of self-efficacy underlies the study as the perspectives of the teacher revealed what motivates them to move beyond their pedagogical comfort zone to meet the needs all students. In the next section, I describe the qualitative research design and approach, participants, and process I used to collect and analyze the data. In addition, the next section includes the interview protocol, process for obtaining consent from potential participants through ensuring their awareness of the purpose of the study, procedures, protection of confidentiality and privacy, and disclosure of risks and benefits involved in the study.

Section 2: The Methodology

Research Design and Approach

The methodological design for this study was an exploratory qualitative case study because the approach offered the best opportunity to explore actual events in a natural setting (Creswell, 2012). Exploratory case studies are primarily used to explore a phenomenon rather than to describe or explain phenomena (Yin, 2014). This design fit the purpose of this study—to explore the perspectives and practices of incorporating reading instruction within math, science, and history content areas in Grades 9-12—because the study was focused on a small group of informants in a specific time and place that created a bounded system and the behavior of the participants in the study could not be manipulated (Creswell, 2012). There was a limit to the number of participants who could be interviewed, which created a boundary for involvement of participants (Lodico, Spaulding, & Voegtle, 2010). The design also facilitated exploring a phenomenon within its environment using a variety of data sources relevant to the research questions and guaranteed that the phenomenon was explored through multiple perspectives (Lodico et al., 2010; Patton, 2015).

Other qualitative designs were not appropriate for answering the research questions in the study. Narrative design methodology was not appropriate because the purpose was not to focus on the lives of the participants and stories about personal lived experiences (Merriam, 2009). Ethnographic design requires the researcher to observe behavior by interacting with participants in their activities and to identify shared patterns of behavior exhibited by the group (Creswell, 2012), so it was not appropriate for the

study. Additionally, the aim of this study was not to develop a theory about a phenomenon of interest (Creswell, 2012), so the grounded theory approach was not appropriate. Finally, the purpose was not to seek to understand participants' subjective experiences and interpretation of the world (Creswell, 2009), so phenomenology was not an appropriate design. Further, a quantitative design was not appropriate for this study because data were used to explore the central phenomenon of teachers' perceptions toward incorporating reading comprehension strategies into their content area instruction and not to examine the relationships among variables. The data most pertinent to exploring the central phenomenon included interviews and lesson plans, all in the form of words, rather than numerical data that would be collected for quantitative studies.

Before starting this research, permission to conduct this study was obtained from the institutional review board (IRB) of Walden University (approval no. 03-07-19-0428129) and from the district superintendent and the school principal who served as the gatekeepers for the site where the study was conducted. Upon approval of the IRB, district superintendent, and school principal, e-mails were sent to teachers in the math, science, and history departments requesting their participation in the study.

Participants

The study was conducted at a local high school in the Southwest United States classified as a rural environment with an enrollment of approximately 7,000 students in Grades 9-12. The student body population at the time of data collection was 56% Caucasian, 33% Hispanic, and 8% African American, with 49% of the population

classified as economically disadvantaged. There were 43 math, science, and history teachers who teach in the high school.

Purposeful sampling was the sampling method, and all 43 teachers were invited to participate in the study with the anticipation that eight would form the sample. This number was selected in accordance with sample size for qualitative case studies as recommended by Guest, Bunce, and Johnson (2006). Upon approval of the IRB application, potential participants were contacted via e-mail requesting their participation in the study. Interviews were scheduled for the four individuals who agreed to participate in the study. Interview data were analyzed while the interviews were being conducted and the final sample size of four was determined when data saturation was reached—that is, when analysis showed no further insights with new interview data (Creswell, 2012; Lodico et al., 2010).

The first measure of participant protection for the study was acquiring approval from the IRB committee at Walden University to guarantee proper measures were in place to protect each participant's rights. To gain access to the research site, letters were drafted to the district superintendent and the high school principal requesting permission to conduct the research. An e-mail was sent to the prospective participants requesting their participation in the study. A copy of the informed consent form was included in the e-mail to familiarize prospective participants with the research to assist in deciding to participate in the study. The consent form explained the measures involved in the study and the participants' rights to withdraw from the study at any time without consequences. All participants were contacted, and a suitable location and time was established for the

interview. Prior to the interview, participants were asked to sign the informed consent form. In accordance with the protection of human subjects, participants were informed that they could decline to participate in the research study at any time. Participants were assured that their confidentiality would be protected through coding methods of the data collected. Further, although I am an employee in the same district as the participants and have experience with one of the subject areas from which participants were invited, I have not supervised faculty in any of the departments and have not had any authority over any faculty.

Data Collection

Data collection included interviews with the participants and the examination of lesson plans. The lesson plans of the teachers were collected for 3 consecutive weeks to identify which reading strategies were used across various lessons. Examination of lesson plans enabled corroboration of strategies for teaching reading described by teachers in the interviews.

I designed the interview questions to explore the teachers' perspectives and practices concerning reading instruction in secondary content area classrooms and provided data pertinent to answering the research questions. Interviewing teachers individually and confidentially allowed them to give an account of their individual instructional pedagogy and professional insight on reading instructional strategies in their content area. A semistructured interview approach was used to assure consistency across participants and allowed for flexibility to pursue topics as they arose (Wengraf, 2001). Interviews were scheduled at the convenience of all participants and took place at the end

of the school day in the conference room of the district's administration building. The interviews were approximately 45 minutes in length. Permission to audio record the interview was requested from each participant, and they all agreed to the audio recording of their individual interview. All interviews opened with an introduction of the study and the participants' consent to participate in the study. (The interview protocol is provided in Appendix B.) Collection of interview data continued until data saturation was reached because new data were redundant with previous data and no new codes or themes emerged that influenced findings about the developing categories (Saunders et al., 2018).

The names of participants and any other identifying information were not included in written reports. Data collected from the interviews were transcribed and transcripts housed in digital files that were password protected. Each participant was assigned a pseudonym to maintain confidentiality of data and a unique identifier that did not disclose personal identity. The purpose of the precautionary measures was to protect the rights of participants' and maintain researcher accountability. An audit trail was also kept for all records to provide a transparent description of the steps in the study, decisions at each step, and findings that emerged (Merriam, 2009). The audit trail included raw data, process of data reduction and development of categories, and notes at each step of data collection and analysis (Lincoln & Guba, 1985).

Data Analysis

Data analysis was conducted according to the guidelines of expert sources (Creswell, 2012; Merriam, 2009; & Yin, 2014). Data analysis was conducted in several phases including (a) data preparation, (b) data reduction through chunking, (c) coding,

and (d) clustering; (e) data representation through identification of themes; (f) validating the accuracy of findings; and (g) interpreting findings. The first phase involved preparing the data for analysis. I transcribed the audio tapes verbatim and consolidated the lesson plans into one document aligned with the district lesson plan format. To ensure that my transcriptions were accurate, I listened to the complete recorded interviews once through without transcribing to gain an understanding of each participant's responses. I then listened to each recorded interview a second time, pausing at lines and words, to transcribe verbatim into a Word document.

The second phase of data analysis involved data reduction and interpretation through chunking. I first read through the interviews several times. I then highlighted and underlined sections that reflected likenesses and differences among the interviews. I used different colors to code for interview segments that reflected similar responses. I iteratively reviewed the data multiple times to ensure that all data were included in a highlighted chunk. This phase of data analysis resulted in 16 chunks of data from the interviews that shared similar meanings.

The third phase of data reduction involved assigning specific colors to common words and phrases that were then grouped into clusters. This phase of data analysis resulted in nine clusters. The fourth phase of data reduction involved assigning codes to clusters and grouping the codes into categories to identify preliminary themes within the data. These preliminary themes were identified using inductive reasoning. This phase of data analysis resulted in six preliminary themes. The data from the lesson plans were then used to confirm or disconfirm these themes. The fifth phase involved reducing the

preliminary themes into four overarching themes that were mutually exclusive and answered the research questions. Excerpts from the interviews and lesson plans were used to build a rich description of the themes.

Approaches to Validate Accuracy of the Findings

The sixth phase of data analysis involved ensuring the validity of the data. Several approaches were used including triangulation, member checks, peer debriefing, researcher reflexivity, and consideration of discrepant cases.

Triangulation. Triangulation involved the search for convergence or consistency of evidence from more than one source. I used evidence from the lesson plans to corroborate themes based on evidence from the interviews.

Members checks. Members' checking was conducted after interview transcriptions were completed. I emailed individual interview transcripts to each participant to verify that the information transcribed was an accurate accounting. This approach followed the guidelines for member checking of Carlson (2010), Forbat and Henderson (2005), and Birt, Scott, Cavers, Campbell, and Walter (2016) that providing the transcripts offers validation of the accuracy of the record and resonance with each participant's experience but does not extend to how their experiences aligned with or differed from other participants that would be synthesized in the findings. Participants were given 10 days to review their transcripts. All participants replied that the information accurately reflected what they expressed in the interview and that no edits or revisions were needed.

Peer debriefing. Peer debriefing involved asking a colleague or someone familiar with the phenomenon to provide critical feedback on descriptions, analyses, and interpretations. I used a peer debriefer to review the data to establish accuracy of the data collected from the participants in the study. I selected the peer reviewer because of this person's expertise and diverse experiences in the educational system as a building administrator, educational consultant, and curriculum and instruction specialist. I provided the peer reviewer with a copy of the complete study, interview transcripts, and the color-coded analysis table. I asked her to provide feedback on the analysis and findings. In her written report, the peer debriefer responded that analysis of data and findings accurately represented the information from the interviews and lesson plans, and the data sources were sufficient for answering the research questions.

Researcher reflexivity. I sought to understand and then self-disclose my assumptions, beliefs, values and biases that might have influenced my interpretation of the data. I used bracketing in the data analysis worksheets and made notations in the audit trail as a record of reasons for data interpretation (Yin, 2014).

Discrepant cases. To represent, report, and interpret findings, I described the findings in a narrative, used a table to augment the narrative, and explained the results using actual excerpts from data to support the findings. I sought evidence inconsistent with the emerging themes and searched for other explanations for the same evidence to assure that interpretations reflected all data. I searched for discrepant cases that did not fit emerging patterns to reduce the possibility of bias in data analysis and assure the validity

of finding (Creswell & Poth, 2016). I found that all data were aligned with the research questions and themes. No discrepant cases were evident in the data.

Data Analysis Results

The purpose of this study was to investigate the perspectives of high school content area teachers about incorporating reading instruction into content areas instruction and the types of reading instructional practices they use. The themes that emerged from the research revealed that self-efficacy affected how the teachers approached tasks and challenges in teaching reading within high school content instruction.

Themes. Four themes emerged about perspectives of incorporating reading instruction and the instructional practices used to enhance reading comprehension: (a) consultation, (b) time constraints, (c) professional development, and (d) differentiated instruction.

Consultation. The participants shared similar perspectives about wanting the assistance of a reading specialist or reading coach to help advance their knowledge and skills for incorporating content area reading instruction into their content instruction. They focused on not having information about their students reading abilities or having the tools to access evaluation data on their reading abilities. For example, Participant B stated, “I use a technique called popcorn reading as an attempt to gauge their words, the students’ reading abilities to call the word in the text, and I use the data from formative and summative assessments for identifying possible reading deficits.” Three participants expressed concerns about teaching content material to English language learners,

addressing language barriers and reading deficits, and including the English language proficiency standards in content instruction. For example, Participant A stated, “There should be reading specialists; they have techniques and materials that would help us.”

Time constraints. Three participants expressed the need to spend classroom time covering content material and believed they could not include reading instructional strategies as an intentional part of instruction. Two participants perceived that student chronic absenteeism created a time constraint for incorporating reading instruction into content area pedagogy, as they had to focus on assisting students who are absent because of health or extracurricular activities in catching up on missed work. For example, Participant A stated, “I have students who missed 30 day of class in the spring semester.” Two participants believed that the master schedule created a barrier to incorporating reading instruction into content instruction because of the time constraints. For example, Participant A stated, “Class periods are 46-minute blocks, and three times a month there are meetings. You need a schedule that allows time for incorporating reading instruction and teaching content material.” Participant B stated, “I don’t have time for that, I’m trying to teach my World Geography content.”

Professional development. The participants expressed wanting more training to assist them in incorporating reading instructional strategies into their content instructional practices and to assist them with the skills and strategies needed for disciplinary literacy. For example, Participant A stated, “Teachers at all levels of years of service can benefit from professional development to help continue growth in their knowledge base to assist

student learning.” Participant B also stated, “We should have more interdepartmental trainings.”

Differentiated instruction. The participants expressed the belief that instructional strategies needed to be varied and differentiated to enhance reading comprehension.

Three participants currently used questioning though did not find it to be an effective strategy for promoting reading comprehension. For example, Participant A stated, “I give assignments where they must read, and I would question them to see if they did.”

Participant C stated, “Classroom discussion has been very difficult. I ask them a question in a group setting. I’m wondering why they can’t answer my question.” The weekly lesson plans for Participant D included guiding questions to be asked during instruction.

Targeted acceleration, scaffolding, small group instruction, and peer tutoring were also identified as effective strategies for differentiating reading comprehension instruction. Participant D stated, “When breaking down difficult text, I walk them through it step by step.” Participant D also stated, “I use small group instruction as a way for students to collaborate and share the work to complete assignments.” In contrast to Participant D’s use of small group instruction, Participant A stated, “Small group instruction allows me to see if I’ve met their needs.” Participant A stated, “They might be in small group where I have students who have mastered the material and they will teach it to the other students.”

Table 1 shows excerpts related to the theme and subthemes related to RQ1: What are the perspectives of history, math, and science teachers concerning their ability to provide reading instruction within content area classroom of students in Grades 9-12?

Table 2 shows excerpts related to themes and subthemes related to RQ2: What approaches are identified by high school teachers of history, math, and science for reducing the barriers to incorporating reading instruction into their content area pedagogy? Table 3 shows excerpts related to the theme and subthemes related to RQ3: What reading instructional practices do Grade 9-12 history, math and science teachers' view as supporting effective reading instruction to enhance reading comprehension?

Table 1

Excerpts from Data Sources Related to Theme of Consultation

Theme	Subtheme	Interview and Lesson Plan Excerpts
Consultation	Reading Specialist/Reading Coach	<p>I see specialist at the elementary and Jr. High level. They start to disappear at secondary. I think reading specialist because of their understanding of the Biology behind reading. There should be a reading specialist that have techniques and materials that would help us. (<i>Interview: Participant A</i>)</p> <p>I would like to have a reading instructional coach. Someone to teach me in real time how to weave that in. I need someone, a person in my room showing me. Modeling. (<i>Interview: Participant C</i>)</p>
	Special Population-ESL Students	<p>I'm not confident teaching reading of historical text to beginning English speakers. I feel like I could do better teaching my ELL students. (<i>Interview: Participant D</i>)</p> <p>I'm having difficulty teaching reading to an ESL or ELL student. Interview: Participant B</p> <p>Boy, my poor "L" kids they are struggling. L's, these kids, I know how important it is to help them and I feel like we're losing that battle. (<i>Interview: Participant C</i>) ELPS (English Language Proficiency Standards) included with the standards listed above. Lesson Plans: Participant D</p>
	Identification of reading deficits	<p>Unless I see something in the data that leads me to believe they have a reading issue. (formative/summative assessments). If their retest is not passed, then we start to look a little deeper to see if they've been having reading problems. (<i>Interview: Participant C</i>)</p> <p>I typically do some popcorn reading from time to time to gauge their words. (<i>Interview: Participant B</i>)</p>

Table 2

Excerpts from Data Sources Related to Themes of Time Constraints and Professional Development

Theme	Sub-Theme	Excerpts
Time Constraints	Class Attendance	Sports mode or drill team mode or whatever, cause kids to miss a lot. I mean, I have golf students who miss 30days in the spring. Interview: Participant A I feel for high school especially chronic absenteeism is a real barrier. <i>(Interview: Participant D)</i>
	Scheduling	I ain't got time for that (working on literacy) I'm trying to go teach my World Geography course. Interview: Participant C I think you need time. You need schedule. You need time in your schedule where reading can occur. You need time for teaching reading. <i>(Interview: Participant A)</i>
	Content Accountability	As long as the district take it as a priority of reading. Interview: Participant A In my discipline reading is not held enough. I guess, people don't see it as high enough need. They don't prioritize as much as they should. Nobody takes literacy seriously and that they should, its super important. <i>(Interview: Participant B)</i> But we are losing kids, and really we're losing their interest the kids who have trouble reading. <i>(Interview: Participant C)</i>
Professional Development		You need to get trained. I don't care if you've been teaching for 20 or 30 years, you need to listen to the experts. <i>(Interview: Participant A)</i> Maybe even taking an English class just to see how they teach it from an English teacher's point of view. We should have more interdepartmental trainings. <i>(Interview: Participant B)</i> I feel like for secondary especially, having specific social studies (history) training. More professional development I think would be really helpful especially in our department; a lot of us have been really concerned about PD for ESL-sheltered instruction. <i>(Interview: Participant D)</i>

Table 3

Excerpts from Data Sources Related to Theme of Differentiated Instruction

Theme	Subtheme	Excerpts
Differentiated Instruction	Scaffolded instruction	Breaking down difficult text. I walk them through step by step. <i>(Interview: Participant D)</i>
		They are not used to reading material, so you have to do it in small doses. <i>(Interview: Participant A)</i>
		I teach the material in multiple ways of delivery you know, lecture type, some traditional, and we use videos, we use audio, we use activities, small group, large group, experimentation, of course lab. <i>(Interview: Participant A)</i>
	Small Group Instruction	Do the reading in class in small groups. Allows me to see if I've met their needs. <i>(Interview: Participant A)</i>
		Partners of 2 or 3 small groups and I have them walk through the material. <i>(Interview: Participant D)</i>
		Small group guided reading-breaking into chunks. <i>(Lesson Plans: Participant D)</i>
		Small group is just done with technology. Students share slides and collaborate with one another. <i>(Interview: Participant C)</i>
		Students can complete small group lab activities for reinforcement. <i>(Lesson Plans: Participant B)</i>
	Targeted Acceleration	We group them and get them doing more reading and writing. <i>(Interview: Participant C)</i>
		I need to take time and re-present the material they didn't get from reading. <i>(Interview: Participant A)</i>
		I know we are moving toward a sheltered instruction class. <i>(Interview: Participant D)</i>
		Different tools online to pull reading passages with different lexile levels. <i>(Interview: Participant D)</i>
		Have students look up different examples of natural selection in the real world. <i>(Lesson Plans: Participant B)</i>

(table continues)

Theme	Subtheme	Excerpts
	Questioning	<p>I give assignments where they must read um... the textbooks and must come back with an understanding and I would question them to see if they did that. (<i>Interview: Participant A</i>)</p> <p>Classroom discussion has been very difficult. I ask them a question in a group setting I'm wondering why they can't answer my question. (<i>Interview: Participant C</i>)</p> <p>Guiding Questions for content comprehension- What have been significant social and political issues from the 1990's into the 21st century, and how have they been resolved? (<i>Lesson Plan: Participant D</i>)</p>
	Vocabulary Instruction	<p>I like to start each unit by figuring out what are the basic vocabulary terms that I know they have never heard before and kind of giving them a practice into it. (<i>Interview: Participant C</i>)</p> <p>I'll try to break the words down into like the prefix and the suffix. (<i>Interview: Participant B</i>)</p> <p>If I can't draw it directly because it's something that can't be seen with the eye I try to draw an analogy or use figurative language. (<i>Interview: Participant B</i>)</p>
	Peer Tutoring	<p>They might be in small group where I have students who have mastered the material and they will teach it to the other students. (<i>Interview: Participant A</i>)</p> <p>Breaking down different text and then having the kids teach each other. (<i>Interview: Participant D</i>)</p>
	Interventions	<p>Academy time-student get extra help from another teacher to address their needs</p> <p>Maybe it's something I can't get across to them in my methods; I allow them to go to another teacher for help. (<i>Interview: Participant A</i>)</p> <p>Accommodation: Oral and written instructions, and guided notes. (<i>Lesson Plans: Participant D</i>)</p>

Summary of outcomes. Results showed that the participants perceived content area reading instruction to be important in all content areas, they needed the assistance of a more knowledgeable educator who could provide targeted professional development in reading instruction within content areas, and they were most concerned about instructional practices they could incorporate for general education students and students with reading challenges, such as English language learners. These findings are similar to prior research findings that teachers believe reading instructional strategies have a positive effect on reading comprehension and student content learning and knowledge of instructional strategies for content area reading instruction are important to improve student achievement (Çakıcı, 2017; Hong-Nam and Szabo, 2017; Warren-Kring & Warren, 2013). Also similar to my findings, teachers in prior research expressed the need for more instruction on how to implement content area reading strategies (Bennett & Hart, 2014; Colwell & Enderson, 2016; Orr, 2014; Moreau, 2014; Thacker et al., 2016).

Bandura's theory of self-efficacy provides a framework for explaining these findings. The teachers' perspectives about incorporating reading instruction in content areas and the types of reading instructional practices they used reflect the constructs of self-efficacy. The teachers used reading strategies based on their prior content teaching accomplishments, discussions with colleagues, and feelings when attempting to teach reading comprehension. They also identified the importance of professional development, which would enable them to watch successful reading instruction and receive verbal encouragement to carry out new instructional strategies. Though the teachers faced barriers to incorporating reading instruction into their content instruction, they expressed

motivation to move beyond their pedagogical comfort zone to meet the needs of their students.

In response to the first research question involving the perspectives of teachers concerning their ability to provide reading instruction within content area, the teachers expressed that reading instruction is vital but that they lacked sufficient skills and knowledge to teach reading strategies in their discipline. They recognized that they needed greater depth of knowledge for incorporating reading strategies into their content specific subject area. The teachers perceived they could be more effective with all students if they had the assistance of a reading specialist or reading coach. The teachers also identified teaching second language learners to comprehend the required expository text material as a particular concern and that a reading specialist or coach could help them expand their pedagogies to address this need. These findings are in contrast to prior research that did not offer findings on the kinds of support that would enable teachers to implement reading instructional strategies across content areas. As shown in Table 1, results for research question one aligns with the theme of consultation.

For the second research question involving the approaches identified by the history and science teachers for reducing the barriers to incorporating reading instruction into their content area pedagogy, the participants concurred that incorporating reading comprehension strategies into their instruction was not a primary focus. They identified time constraints, scheduling, student absenteeism, and lack of content-specific professional development as barriers to incorporating reading strategies into their teaching practices. They expressed the importance of finding ways to reduce some of the

barriers to improve teacher effectiveness and student growth; however, they were unable to offer suggestions on how to reduce these barriers. They reiterated that they would welcome the addition of a campus resource person as a coach, collaboration with colleagues across and within content subjects, and opportunities to attend professional development sessions delivered by expert consultants.

The third research question involved the teachers' perspectives on reading instructional practices that support effective reading instruction to improve reading comprehension. The teachers perceived differentiated instruction that included targeted acceleration, scaffolding, small group instruction, and peer tutoring are supportive for enhancing students' reading comprehension of content text material. The strategies identified by the teachers in the present study complement those found in prior research such as activating prior knowledge, reciprocal teaching, and the think-aloud strategy (Bernadowski, 2016; McCulley & Osman, 2015; Mistar et al., 2016; Pilten, 2016; Tarchi, 2015). A strategy not mentioned by the teachers but found to be effective in other studies is disciplinary literacy (Charner et al., 2016; Dobb et al., 2016; Graham et al., 2017).

Project Deliverable as an Outcome of Results

This study addressed a gap in practice at the local level and education profession about the perspectives of teachers on the issues that made it difficult for them to incorporate reading instruction into their content instruction. I found that the participants had similar perspectives about wanting the assistance of a reading specialist or reading coach to be more effective with all students when incorporating content area reading instruction. They believed that differentiated instructional strategies are effective reading

practices to enhance reading comprehension, but believed more professional development is needed to assist teachers in incorporating reading instructional strategies into their instructional practices. The participants identified barriers they believed impeded the incorporation of reading instruction in content specific areas, but they did not offer any possible solutions to reduce the barriers. The teachers believed reading instruction is vital, but perceived they lack adequate skills and strategies to teach reading strategies in their discipline that could help readers at all levels and second language learners.

Though the teachers faced barriers to incorporating reading instruction into their content instruction, they expressed motivation to move beyond their pedagogical comfort zone to meet the needs of their students. These results lead to the decision of a project to focus on teacher development. The description of the project will be explained in section 3.

Section 3: The Project

Introduction

The purpose of this study was to investigate the perspectives of high school content area teachers about incorporating reading instruction in content areas and the types of reading instructional practices they use. According to previous research and findings from this study, there is a need for professional learning to address secondary content area teachers' perspectives and practices concerning reading instruction. Findings indicated that the teachers believed reading instruction is important, but perceived that they lack adequate skills and strategies to teach reading strategies in their discipline. In addition, they were concerned about the amount of time reading instruction would take away from teaching their core subject content. Participants emphasized their need for professional development on how to effectively incorporate reading instruction into their content instruction.

Due to these participant responses, the project study deliverable was a professional development plan, which addresses the teachers' expressed need for more training to assist them in incorporating reading instructional strategies into their content instructional practices and to assist them with the skills and strategies needed for disciplinary literacy. The goal of this professional development project is to improve teachers' knowledge of content-specific reading instruction and their ability to deliver effective reading instruction within their content instruction. The professional development project will begin with a 2-day professional development session before the school year begins that will focus on incorporating reading instruction into content lesson

delivery for secondary discipline-specific teachers of Grades 9-12. Subsequent to the 2-day session, follow-up collaborative sessions will be scheduled bi-monthly throughout the school year for teachers to discuss areas of needed reinforcement and refinement of instructional strategies.

Rationale

The project genre of professional development was chosen to address the findings that the teachers wanted assistance in providing reading instruction within content areas. The project also addresses the problem of insufficient attention to instruction aimed at enabling students to comprehend content area text material. The teachers will be provided with content-specific reading instructional strategies that they can incorporate without detracting from delivering required content. The professional development project has been designed to enable content area teachers to address the reading instructional needs of their secondary level students through the 2-day course and ongoing collaboration throughout the school year.

Review of the Literature

This professional development project addresses the problem and findings of the study and aligns with the professional learning and training needs of secondary content area teachers. For exploring the literature on professional development in content area reading instruction, I focused on the topics of andragogy, effective professional development, content specific professional development, collaboration, and coaching and mentoring. The following databases were examined: Academic Search Complete, Thoreau, ProQuest Central, and Education Resource Information Center (ERIC). I also

utilized Google Scholar to locate sources for the literature review. I used the following search terms: *professional development, effective professional development, adult learning, andragogy, educational coaching, staff development, collaboration, disciplinary literacy, content area reading instruction, and content area reading strategies*. The 30 studies in this literature review met the criteria of being peer-reviewed and published within the past 5 years.

When considering the most effective ways to plan and deliver professional development for adult learners, it is important to understand the characteristics of the adult learning process. According to Knowles (1984), adult learners search for learning opportunities that promote change to refine their current knowledge base and instructional practices. According to the theory of adult learning, the adult learner (a) can manage their own learning, (b) has a mature self-concept, (c) has a rich history of prior experiences, (d) is willing to learn, (e) has a point of reference for learning, and (f) is motivated to learn by internal factors (Merriam, 2001). Thus, professional development for adult learning should take into consideration the importance of teachers' working experiences and include opportunities to apply new learning (Owen, Pogodzinski, & Hill, 2016). Additionally, because adults learn differently than children (Knowles, Holton, & Swanson, 2015), effective training that influences professional growth is focused on learning strategies that are relevant, integrated into prior knowledge, and offer ample opportunities for feedback

Effective professional development increases teacher knowledge and instructional purpose (Parson, Ankrum, & Morewood, 2016). Greatest effectiveness has been shown

when professional development involves more than one learning opportunity through phases and multiple sessions (Mangope & Mukhopadhyay, 2015; Snyder et al., 2018). Effective professional development is also content focused, incorporates active learning that reflects adult learning theory, supports collaboration in work contexts, offers models and the modeling of effective practices, provides coaching and mentoring from experts, offers opportunities for feedback and reflection, and is of a sufficiently sustained duration (Darling-Hammond, Hyler, & Gardner, 2017). Integrating all seven of these qualities creates the most effective professional development (Bates & Morgan, 2018). In contrast, single professional development sessions, frequently referred to as “sit and get,” do not provide the continuous support that teachers need to monitor and adjust their teaching (Bates & Morgan, 2018).

The quality of continuing education experiences and the support teachers receive have been found to be among the most important factors in student academic growth, particularly within diverse learning environments (Desimone & Stuckey, 2014; Gaitas & Martins, 2016; Singh-Pillay & Sotsaka, 2017). Collaboration, reflection, and knowledge of result are most influential in impacting changes in teacher practices (Forrest, Lower, Potts, & Poyser, 2019). For instance, although secondary teachers may view professional development to be a valuable learning tool, teacher leadership and collaboration among colleagues are needed to increase the effectiveness of professional learning opportunities (McCray, 2018).

Another quality of professional development is when learning opportunities are specific to the day-to-day practices of teachers (Bibbo & D’Erizans, 2014; Garet,

Heppen, Walters, Smith, & Yang (2016). Content-specific professional development assists teachers in acquiring greater understanding of content area while developing skills and strategies for promoting higher levels of thinking and student academic achievement (Callahan, Saye, & Brush, 2016). However, professional development in specialized content areas is less common and often limited to single-day workshops because content area teachers have limited availability of time for collaboration with colleagues about content specific pedagogical practices. But when teachers view professional development as pertinent and beneficial, their self-confidence, self-efficacy, and proficiency improves (MacKay, 2015).

Additionally, research on professional development that incorporates collaboration has indicated that when teachers share the responsibility for designing the sessions, teachers are able to expand their knowledge and refine their teaching practices (Ciechanowski, 2014; Johnston & Tsai, 2018). For example, Ning, Lee, and Lee (2015) found that positive effects of team collaboration were stronger for teams that valued sharing responsibilities among the members of the collaborative professional learning community. They concluded that when teachers meet to discuss the teaching and learning process and share resources and ideas, the outcomes are substantially better than when teachers seek to enhance their own knowledge and skills independently. The time teachers spend together collaborating and planning contributes to teacher effectiveness and student success (Jao & McDougall, 2016). However, trust is essential in such collaborative groups for the teachers to be comfortable and open with their partners, willing to question their existing instructional practices, and to try new ones (Tallman,

2019). Overall, the research on collaborative sessions indicates that teachers can widen their instructional focus and knowledge for developing effective instructional practices (Ma, Xin, & Du, 2018), and collaborative sessions are essential to improving pedagogical knowledge (Jao & McDougall, 2016).

Mentoring is another quality of effective professional development because of the focus on one-on-one encouragement and feedback (Desimone & Pak, 2017; Izadinia, 2015; Tanner, Quintis, & Gamboa, 2017). Collet (2015) conducted a case study to explore the ways in which mentoring supports teacher change and found that acknowledging the learner's previous knowledge and experience and continuously gauging the kinds of support needed are necessary. As teachers bring varying experience levels, peer mentoring can enable colleagues to share ideas and mentoring by more experienced colleagues with less experienced teachers can provide opportunities to learn new pedagogy through the lens and expertise of more experienced teachers (Kelly & Cherkowski, 2015). Regardless of the mentoring model, Kairat (2019) found the greatest professional growth when mentoring involved a learning partnership within a reciprocal relationship. However, mentoring must also involve advice on strengths and areas needing improvement (Carr, 2017).

Follow-up sessions are another quality of professional development because such sessions enable teachers to continue improving their instruction (Garbacz, Lannie, Jeffery-Pearsall, & Truckenmiller, 2015). It has been found that teachers who receive coaching are more likely to support and implement new curriculum approaches than

those receiving more traditional professional development (Suchánková & Hrbáčková, 2017).

The professional development sessions that I developed incorporate the qualities of effective professional development found in prior studies. I will provide the teachers with a platform to learn, collaborate, practice, and advance their knowledge of content reading instruction. The teachers will learn about research-based before, during, and after reading strategies that assist all students in improving their reading comprehension of expository text. The professional development sessions will also encourage the participants to recognize the importance of collaboration within their content area and across academic disciplines.

Project Description

The purpose of this professional development project is to advance the knowledge and instructional practices of content area teachers to incorporate effective reading instructional strategies into their content instruction. The project will begin with a two-day course before the school year begins. The first day will involve a course overview, assessment of participants' knowledge of reading strategies and instruction, and presentation of content specific reading instruction. The second day will include an in-depth review of content standards, development of learning targets, identification of reading tasks associated with each standard, and development of lesson plans incorporating reading strategies that assist student comprehension before, during, and after reading expository text. Providing participants with an opportunity to actively

engage with reading strategies and create plans that are specific to their content area will enable application of this new information to classroom instruction.

Follow-up sessions during the school year will take place bi-monthly. These sessions will include roundtable and whole group collaborative sessions based on new learning of content specific reading instruction and strategies. For the roundtable discussions, the teachers will be grouped according to their personal selection of a reading genre by selecting a genre card at the sign-in table. Moderators for each roundtable discussion will be instructional coaches and district content coordinators. The district advanced academic coordinator will serve as a roving moderator to assist in facilitating all roundtable discussions. The following questions will guide the roundtable discussions:

1. In what ways does content area literacy approaches impact student learning in discipline specific subjects?
2. What is content area? What are reading strategies in content specific subjects?
3. Why should reading strategies be taught in secondary content specific subjects areas?
4. How important is teaching reading in all content areas? Why?

Resources needed to implement this professional development are accessible within the school where the study was conducted. In order to secure a location for conducting the meetings and assembly of tables and chairs, a building request form will be submitted to the school administrator. The facilitator will need a computer presentation station (laptop, remote presentation clicker, and screen) and internet access.

Teachers will need laptops and internet access. Additional personnel needed for follow-up sessions will include instructional coaches and district content specific coordinators.

One potential barrier to effective implementation of the project is teacher attendance. As the professional development will be optional and will require ongoing involvement throughout the school year, teachers will only attend if they are convinced that the sessions will improve their instructional knowledge and practices. Another barrier is the release time needed for teachers to attend the collaborative sessions.

Possible solutions include providing clear benefits to the teachers in the communication promoting the professional development opportunity through such venues as school email, district call-out system, district twitter account, and announcements at the outset of departmental meetings.

Proposal for Implementation and Timeline

The first step for implementation will be to share the findings from the study with district and campus administrators. This will provide a forum for discussing the proposed professional development two-day session and follow-up collaborative sessions.

The timetable will be established after meeting with the assistant superintendent of innovative teaching and learning to identify the best dates, times, and locations for the two-day session and monthly collaborative sessions. When the scheduling logistics are finalized, I will submit a detailed outline of the goals, objectives, and activities of the sessions and request the assistance of two district instructional coaches to assist with material preparation, teacher registration, and monitors for group activities.

As the researcher and professional development facilitator, my role and responsibilities will be to communicate with district and campus leaders about the project, facilitating the two-day professional development session, monitoring the collaborative sessions, and collecting and analyzing evaluation data. The role and responsibility of the content teachers will be to attend and actively participate in the two-day session and collaborative sessions. The role and responsibility of district administrators will be to provide resources for the two-day session (i.e., a room, materials, and audio-visual equipment) and collaborative team time for bi-monthly sessions during the school year. (See Appendix A for the components of the project.)

Project Evaluation Plan

Formative and summative evaluations will be used to determine the effectiveness of the project for improving the participating teachers' ability to incorporate reading instruction effectively in their content instruction. For the formative assessment of the two-day session, the teachers will be asked to answer open-ended questions regarding examples of their learning, concepts that need more elaboration or clarification, and the information that was the most and least beneficial. Data will be used to adjust plans for the collaborative sessions. Formative assessments for the collaborative sessions will be conducted monthly to determine the content and structure for subsequent sessions, the organization of the sessions, and how well learning needs are being met.

For the summative evaluation, the teachers will be asked to answer closed and open-ended questions after the final collaborative session about the organization of the two-day and collaborative sessions, how well their learning needs were met, their ability to

apply the new information and strategies to their own classroom instruction, and how future professional development sessions could be improved. This evaluation will be completed electronically through a web-based portal.

The key stakeholders are the content area teachers, who expressed the need for professional development so that they could be more effective in teaching reading within their content instruction, and district administrators, who have identified reading instruction in content classrooms as a concern in the district. The project evaluation will provide information that will determine whether providing professional development to content area teachers in a two-day session and subsequent collaborative sessions is perceived by the teachers to improve their ability to provide reading instruction within their content instruction.

Project Implications

The professional development project has been designed to assist content area teachers in incorporating reading instruction so that their students are able to comprehend required text material. The project is important to the teachers and administrators in the local setting as reading instruction within content classrooms has been identified as an important district goal and the teachers in my study expressed the importance of receiving assistance in providing reading instruction.

The project has the potential to influence positive social change by disseminating the content and structure of the professional development sessions if the content area teachers perceive the professional development project to be effective in improving their ability to incorporate reading instruction. Instructional leaders and administrators on

other campuses in the district and beyond may be interested in applying the professional development approach of a two-day session and follow-up collaborative sessions to their own settings to improve the reading instruction provided to students in content subject areas.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

Strengths

The key strength of this project is its focus on addressing the perceived needs of the participants to advance their pedagogical knowledge of content area reading instructional strategies. A second strength of this project is that it will allow enough time for teachers to learn, practice, collaborate, and reflect on new information and strategies over a sustained period throughout the school year.

Limitations

One of the limitations to the project is the commitment from teachers to attend the professional development sessions. Participants in the study identified the need for content-specific professional development for content area reading instruction. However, other teachers in the science, history, and math departments may not have considered the need for professional development and may not prioritize participation among the competing demands in their professional lives. A second limitation is time as it relates to scheduling the professional development sessions. As the 2-day session will be scheduled before teachers are contractually responsible to the school district, the unwillingness of some teachers to participate during noncontract time is a potential limitation to the implementation of the project.

Recommendations for Alternative Approaches

The purpose of this study was to investigate the perspectives and reading instructional practices of secondary content area teachers. Participants in the study

indicated the need for content specific professional development and support for incorporating reading strategies into their instructional practices. Alternatively, other models might improve pedagogical practices and be easier to fit into teachers' highly structured school days.

One possibility is to utilize the district's three student early release days to schedule 2-hour collaborative sessions for teachers who participated in the 2-day professional development session. Another possibility would be to designate 1 day monthly or bi-monthly to meet after school for collaboration and sharing new ideas and strategies for content area reading instruction. A third possibility is to pair teachers to work as peer learners who meet periodically before school, during lunch, or after school to exchange resources, share experiences in trying new strategies, and offer support and encouragement.

Scholarship, Project Development and Evaluation, and Leadership and Change

The research process is a sequence of steps with an organized approach to investigate a phenomenon. The data collected and analyzed from the participant interviews led to the development of this professional development project. Transcribing and coding the data by hand created an opportunity for me to dig deep into the information collected, and I feel that this has given me a more in-depth understanding of the problem and potential solution. Developing the project was inspiring because I designed it to precisely address what the participants believed would assist their pedagogical knowledge to incorporate reading instruction into content -specific instruction.

As an educator and scholar, I have grown as an adult learner and project developer. As an adult learner, the literature review for the project provided information on the importance of designing professional development that includes active learning and collaboration among educators, as learning is a collaborative process and should take place in a collaborative working and learning environment (Dufour & Dufour, 2013). My journey as a researcher has empowered me to be more confident in advocating for and facilitating avenues of change. I feel accomplished to know that I have developed a project that will be used as an instrument to impact teachers' instructional knowledge and student learning.

To advocate change in the world of education, teachers must have the knowledge, skills, and strategies that empower them to become change agents. Agents of change must be evidence-driven, intentional, and resourceful (Tam, 2015). Through the information collected during the research process, I learned that high school teachers do want to incorporate reading strategies into their instruction but feel unprepared to incorporate the strategies for fear of sacrificing content specific instruction. In the course of future endeavors, I would like to develop and facilitate professional development on adolescent literacy across disciplines in Grades 6-12 and continue to conduct research on adolescent literacy as it evolves over time.

Reflection on Importance of the Work

As this phase of my educational journey is ending, it is gratifying to know that my work could have a positive effect on the professional learning and classroom instructional practices of teachers in the setting where the study was conducted. Providing teachers an

opportunity to share their perspectives and practices of incorporating content area reading instruction was the primary focus of this study and project. All teachers interviewed in this study believe reading instruction is essential but perceived that they lack adequate skills and strategies to teach reading strategies in their discipline, and they want the assistance of a more knowledgeable person to help advance their knowledge of content area reading instruction. This project is important in providing discipline specific professional development to support the needs of secondary teachers to assist students' comprehension of expository text.

Implications, Applications, and Directions for Future Research

The project for this study is a 2-day professional development session with follow-up collaborative sessions developed for secondary content area teachers. Participants in the professional development sessions will learn content specific reading instructional strategies that can be incorporated into content specific instruction. The goal of this professional development project is to improve knowledge of content specific reading instruction of high school content area teachers. Based on the research I reviewed, effective professional development in content-specific reading instructional strategies can positively influence teaching practices, self-efficacy, and student achievement. A recommendation for future research would be to widen the lens of the study to include middle school teachers in the same content areas. The extension of the current study could assist districts in the local setting and beyond in improving content-specific reading instruction. In addition, future research can involve experimental studies

that investigate the effectiveness of professional development approaches on improving reading instructional practices within content instruction.

Conclusion

After completing the study, I have reflected on my journey as a learner, educator, and a researcher. In conducting this qualitative case study, I have learned that the participants in the study believe that reading instruction is important but need the assistance of a more knowledgeable educator who could provide content specific professional development in reading instruction. In response to the findings, I designed a 2-day professional development session with follow-up sessions throughout the school year to provide continuous support and collaboration that is intended to improve the incorporation of reading instruction into content area instruction in Grades 9-12.

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Appendix A: The Project

“Reading Instruction in the Content Avenues”

Target Audience: Content area teachers in Grades 9-12

Goal: The goal of this professional development course is to improve content area teachers’ knowledge of content specific reading instruction, and the effectiveness of their instructional delivery in core content instruction.

Objectives:

1. As a result of professional development, teachers will demonstrate effective knowledge of content specific reading instructional teaching strategies
2. As a result of the professional development, teachers will develop lesson plans that incorporates reading instructional strategies into content specific instruction.

Materials needed: markers, chart paper, reading strategies task cards, reflection journal

Target Audience: Science and History teachers in Grades 9-12

Goal: The goal of this professional development course is to improve history and science teachers’ knowledge of content specific reading instruction, and the effectiveness of their instructional delivery in core content instruction.

Objectives:

1. As a result of professional development, teachers will demonstrate effective knowledge of content specific reading instructional teaching strategies
2. As a result of the professional development, teachers will develop lesson plans that incorporates reading instructional strategies into content specific instruction.

Materials needed: markers, chart paper, reading strategies task cards, reflection journal, computers, content subject state standards, course scope and sequence, content textbook

Professional Development Course-Day 1 Agenda

Time	Activity										
8:30-8:45	Registration (assigned seating number according to subject area) Complementary Breakfast										
8:45-9:15	Introduction and Purpose of the Professional Development										
9:15-9:45	Overview of the qualitative case study: -Purpose -Research Questions -Findings										
9:45-10:00	Break										
10:00-11:00	<p>Pre-Assessment Activity- “Journey of Understanding” In a whole group setting participant will tour the wall gallery posters and comment on the specific topics on each poster according the knowledge they have on each topic. (Time duration 20 minutes)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>Before Reading Strategies</td> <td>During Reading Strategies</td> <td>After Reading Strategies</td> <td>Anticipation Guides</td> <td>Content Vocabulary</td> </tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>Activating Prior Knowledge</td> <td>Graphic Organizers</td> <td>Annotating the Text</td> <td>Read Alouds</td> <td>Text Structures</td> </tr> </table> <p>Table Talk- collaborative groups will discuss their experience participating in the Journey of Understanding and create one word that describes their collective experiences. Each group will share and give an explanation of their word choice. (10 minutes) Discussion- How could this activity be used to motivate students and assess the depth of knowledge students bring to a specific learning standard? (10 minutes) Reflection- Participants make their first journal entry reflecting on new knowledge gained, something they want to know more about, or something that cause me to think deeper, etc. Volunteers asked to share their thoughts. (10 minutes)</p>	Before Reading Strategies	During Reading Strategies	After Reading Strategies	Anticipation Guides	Content Vocabulary	Activating Prior Knowledge	Graphic Organizers	Annotating the Text	Read Alouds	Text Structures
Before Reading Strategies	During Reading Strategies	After Reading Strategies	Anticipation Guides	Content Vocabulary							
Activating Prior Knowledge	Graphic Organizers	Annotating the Text	Read Alouds	Text Structures							
11:00-12:00	<p>Lecture: Content Area Reading Instruction What is content area reading instruction?</p> <p>Content area reading is the reading that students need to understand in a particular subject area typically social studies/history and math, but any area outside of English literature instruction. (K12Reader)</p> <p style="text-align: center;">Why teach reading strategies in all content areas</p> <p>Motivation and engagement- creating classroom environments that promote internal motivation, and create meaningful learning goals.</p>										

	<p>High Standards- develop and maintain high standards for text, conversation, questioning, and vocabulary.</p> <p>Comprehension Strategies- instructional strategies that include before, during and after reading strategies to improve understanding of text.</p> <p>Discussion-opportunities for extensive discussion lead by the teacher and collaboration among students.</p> <p>Content learning- teaching content knowledge to ensure high levels of learning of essential standards by all students. Torgesen, Houston, &Rissman, 2007</p> <p style="text-align: center;">Challenges Associated with Content Literacy Instruction</p> <p>Challenges - #1-How do you assist students with reading to learn frequently challenging content area information?</p> <p>Challenges - #2- Disciplinary Literacy instructions embedded within content-area classes such as science, and social studies.</p> <p>Challenge #3 - Teacher Knowledge and Ability- Do you see yourself as a content specialist only? Are you knowledgeable about how to integrate reading into your discipline?</p> <p>Challenge #4 – Teacher Beliefs and Attitudes What beliefs do you hold regarding teaching reading in your content area?</p> <p>Reflection- Participants make their first journal entry reflecting on new knowledge gained, something they want to know more about, or something that cause me to think deeper, etc. Volunteers asked to share their thoughts. (10 minutes)</p>		
12:00-1:00	Lunch on Your Own		
1:00-3:00	<p style="text-align: center;">Characteristics and Demands of Expository/Informational text</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>The Demands of Science Text</p> <ul style="list-style-type: none"> • Make meaning from every word and symbol • Close reading and rereading • Focus on order of procedures • Analyze key words and word parts for identification and classification purposes • Divide attention across multiple representations of content • Use scientific (and sometimes mathematical) text features to make meaning </td> <td style="width: 50%; vertical-align: top;"> <p>Characteristics of Science Text</p> <ul style="list-style-type: none"> • Texts are typically concept and idea • Letters and numbers (H₂O) have unique meanings • Many technical words contain Latin or Greek roots that not only reveal meaning but help to enable scientific classifications • Many visual representations • Analysis of procedures/performances, such as lab experiments </td> </tr> </table>	<p>The Demands of Science Text</p> <ul style="list-style-type: none"> • Make meaning from every word and symbol • Close reading and rereading • Focus on order of procedures • Analyze key words and word parts for identification and classification purposes • Divide attention across multiple representations of content • Use scientific (and sometimes mathematical) text features to make meaning 	<p>Characteristics of Science Text</p> <ul style="list-style-type: none"> • Texts are typically concept and idea • Letters and numbers (H₂O) have unique meanings • Many technical words contain Latin or Greek roots that not only reveal meaning but help to enable scientific classifications • Many visual representations • Analysis of procedures/performances, such as lab experiments
<p>The Demands of Science Text</p> <ul style="list-style-type: none"> • Make meaning from every word and symbol • Close reading and rereading • Focus on order of procedures • Analyze key words and word parts for identification and classification purposes • Divide attention across multiple representations of content • Use scientific (and sometimes mathematical) text features to make meaning 	<p>Characteristics of Science Text</p> <ul style="list-style-type: none"> • Texts are typically concept and idea • Letters and numbers (H₂O) have unique meanings • Many technical words contain Latin or Greek roots that not only reveal meaning but help to enable scientific classifications • Many visual representations • Analysis of procedures/performances, such as lab experiments 		

	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">The Demands of History Text</p> <ul style="list-style-type: none"> • Analyze details related to the sources of information and why they were documented • Close reading, often across multiple documents/sources and in reference to one another (i.e., corroboration) • Analyze specialized words for meaning and at cultural, emotional, and cognitive levels • Analysis of documents (who, what, where, and when) is a primary method used to study texts • Use historical text features to make meaning • Intense critique of sources of texts </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p style="text-align: center;">Characteristics of History Text</p> <ul style="list-style-type: none"> • Texts contain historical events, which vary in concept and idea • Authorship central to interpretation of texts • Contextual factors are key (who, what, where, and when), along with the author's purpose/perspective • Culturally specific words have specialized meaning • Information related to timelines and datelines </div> <p style="text-align: center;">Reading strategies that are effective across all content areas</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Activating Prior Knowledge</td> <td style="width: 50%;">Content Vocabulary</td> </tr> <tr> <td>Before Reading Strategies</td> <td>Read Alouds</td> </tr> <tr> <td>During Reading Strategies</td> <td>Text Structures</td> </tr> <tr> <td>After Reading Strategies</td> <td>Graphic Organizers</td> </tr> </table> <p>Partner Activity: Using the content specific text provided choose one characteristic and one demand from the chart and use one of the reading strategies to assist in delivery of instruction.</p>	Activating Prior Knowledge	Content Vocabulary	Before Reading Strategies	Read Alouds	During Reading Strategies	Text Structures	After Reading Strategies	Graphic Organizers
Activating Prior Knowledge	Content Vocabulary								
Before Reading Strategies	Read Alouds								
During Reading Strategies	Text Structures								
After Reading Strategies	Graphic Organizers								
3:00-3:15	<p style="text-align: center;">Exit Ticket</p> <p>Describe your personal takeaways in today's professional learning. Do you have any suggestions for how today's class could have been improved?</p>								

Professional Development Course-Day 2 Agenda

Time	Activity
8:30-8:45	Sign-in/Complementary Breakfast
8:45-9:00	Icebreaker- Stranded on a Desert Island
9:00-10:50	<p>Review content from day 1 learning- Repeat the “Journey of Understanding” activity using new posters with the same topics. Attendees will be grouped across content subject and asked to select a reading strategy poster to note and notice repeated information and the addition of new knowledge. Each group will present their findings</p> <p>Example</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Day 1</p> <div style="border: 1px solid black; padding: 5px; width: 100px; height: 100px; margin: 0 auto;"> <p style="text-align: center; margin: 0;">Activating Prior Knowledge</p> </div> </div> <div style="text-align: center;"> <p>Day 2</p> <div style="border: 1px solid black; padding: 5px; width: 100px; height: 100px; margin: 0 auto;"> <p style="text-align: center; margin: 0;">Activating Prior Knowledge</p> </div> </div> </div>
10:50-11:00	Break
11:00-12:15	Content specific collaborative groups- Identifying and unwrapping essential standards and extracting learning targets to develop lesson plans. Continuous status of the work environment will be monitored by the PD facilitator.
12:15-1:00	Lunch
1:00-3:00 Break is included	Work in content specific collaborative groups to develop standards-based lesson plans that incorporate reading instructional strategies into content instruction.
3:00-3:15	<p>Summative Evaluation: Participants complete a summative assessment of the 2-day professional development course.</p> <p style="text-align: center;">Follow up Sessions</p> <p>Follow up session #1-October 3:30-5:00 Meeting the Individual Needs of Diverse Learners</p> <p>Activity: Sit at the table where you feel you have had the most success or feel most confident incorporating reading strategies. Table Tent areas (Before Reading, During Reading, After Reading, Whole group instruction. Groups will discuss strategies and activities for teaching one of the before, during or after reading strategies. Several activities will be provided for each group to choose from, and prepare a mini lesson to teach the group the selected activity.</p> <p>Break</p> <p>Differentiated instruction-scaffolding reading instruction for content specific- When teachers scaffold reading instruction, they break the reading activity down into smaller parts in order to facilitate comprehension. This can be done by focusing on context-based vocabulary, using graphic organizers, small group instruction, or by introducing background</p>

	<p>information.</p> <p>Assignment: Recruit 3 attendees from the group to have a lesson of their choice recorded. The videos will be used for the next session group discussion. Volunteers will collaborate with the facilitator before the lessons are recorded.</p> <p>Activity: Reflection Journal</p> <p>Follow up session #2-December- Video Presentation 2:30-4:00pm Collaborative session will include attendees watching video sessions of colleagues' instructional delivery of content material with embedded disciplinary reading instructional skills and strategies.</p> <p>Break Discussion: Takeaways from the videos- How were reading strategies incorporated? What effect did it have on lesson delivery? Describe and elaborate on student involvement and mastery of the lesson content.</p> <p>Activity: Reflection Journal</p> <p>Assignment: Design an artifact that represents your new learning. Examples: portrait, mural, letter, narrative, poetry, sketchnoting, etc.</p> <p>Follow up session #3-March- Expressing Myself as a Learner and an Instructional Leader for Students and Colleagues Lecture: Review</p> <p style="text-align: center;">What is content area reading instruction?</p> <p>Content area reading is the reading that students need to understand in a particular subject area typically social studies/history and math, but any area outside of English literature instruction. (K12Reader)</p> <p style="text-align: center;">Why teach reading strategies in all content areas</p> <p>Motivation and engagement- creating classroom environments that promote internal motivation, and create meaningful learning goals.</p> <p>High Standards- develop and maintain high standards for text, conversation, questioning, and vocabulary.</p> <p>Comprehension Strategies- instructional strategies that include before, during and after reading strategies to improve understanding of text.</p> <p>Discussion-opportunities for extensive discussion lead by the teacher and collaboration among students.</p> <p>Content learning- teaching content knowledge to ensure high levels of learning of essential standards by all students.</p>
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Repeat the “Journey of Understanding” activity using new posters with the same topics. Encourage attendees to include all new knowledge gained from the entire professional development learning experience. Strategies and activities can be added to the posters.

Roundtable Discussions: For the roundtable discussions attendees will be grouped according to their personal selection of a reading genre. Attendees will select a genre card at the sign-in table.

Poetry- contemporary, classic, etc.	Romance
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Fiction-all genres of fiction	Mystery/Fantasy
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Moderators for each roundtable discussion will be instructional coaches and district content coordinators. The district advanced academic coordinator will serve as a roving moderator to assist in facilitating all roundtable discussions.

Roundtable Discussion Questions:

- (1) In what ways does content area literacy approaches impact student learning in discipline specific subjects?
- (2) What is content area? What are reading strategies in content specific subjects?
- (3) Why should reading strategies be taught in secondary content specific subject areas?
- (4) How important is teaching reading in all content areas? Why?

Break: During the break display all posters from the “Journey of Understanding” activities. Discuss the evolution of the learning journey according to the information on the posters.

Activity: Show and Tell

Attendees will share their personal artifacts depicting their new learning. Artifacts can be displayed or presented.

Closure

Motivation, Engagement, Participation, Outcome, and Response are key components for incorporating literacy and reading strategies in all content area subjects.

Appendix B: Interview Protocol

Interviewee _____

Date _____

Time _____

Location _____

1. Tell me about how you help your students understand the text material they are required to read.
2. Describe the strategies you use for teaching reading in your classroom.
3. Which strategies have been most effective, and which have been least effective?
4. How confident do you feel about teaching reading in your content instruction?
5. How important do you think it is to teach reading during content instruction?
6. Describe the barriers you experience in assisting your students to read their required text material.
7. What kinds of support do you need for teaching reading in your content instruction?
8. What advice would you give to your school administration that would help you be as effective as possible in helping your students comprehend their required text material?

Appendix C: Evaluation for Professional Development

Professional Development Evaluation-Day 2

Please respond to each item by circling the number that best express your opinion.
(5=excellent; 1=poor).

Participant					
1. Course was well organized.	1	2	3	4	5
2. Course goals and objectives were clearly stated	1	2	3	4	5
3. Course content was relevant to course objectives.	1	2	3	4	5
4. All necessary materials/equipment/resources were provided or made readily available	1	2	3	4	5
5. Overall instructor presentation.	1	2	3	4	5
Influence on Professional Practice					
1. This course improved the educator's knowledge for incorporating content area reading instruction.	1	2	3	4	5
2. This course increased the educator's teaching skills based on research of effective practice.	1	2	3	4	5
3. This course provided information on a variety of disciplinary literacy strategies.	1	2	3	4	5
4. This course provided skills and strategies for planning and delivering instruction that promote high levels of learning for all students.	1	2	3	4	5
5. This course empowered educators to work collaboratively with colleagues to amplify student achievement and teacher effectiveness.	1	2	3	4	5
6. This course improved the participant's professional growth and deepened your reflection and self-assessment of exemplary practices.	1	2	3	4	5

Comments

Please respond to the following questions.

Your answers will assist in determining how to improve the professional learning opportunity.

1. How has this professional development caused you to review your content area teaching strategies and activities?

2. What new learning have you acquired, and how do you plan to implement this new learning in your instructional planning and lesson delivery?

3. What information was most helpful to you?

4. What suggestions do you have to improve this professional learning course?

5. Additional comments.

Appendix D: Summative Professional Development

Professional Development Summative Survey

1. Please identify your position by selecting the appropriate response.

Teacher

Other (please specify)

2. Please identify your subject area by selecting the appropriate response.

History

Science

Other (please specify)

3. Title of professional development event.

4. Presenter

5. My attendance at this professional development was determined by local needs.

Strongly Agree

Agree

Disagree

Strongly Disagree

Not Applicable

6. The presenter was knowledgeable and effective.

Strongly Agree

Agree

Disagree

Strongly Disagree

Not Applicable

7. The strategies used by the presenter were appropriate in helping me accomplish the goal(s) and/or outcomes of this professional development course.

Strongly Agree

- Agree
- Disagree
- Strongly Disagree
- Not Applicable

8. I gained knowledge and skills to implement this professional development into pedagogical practices.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not Applicable

9. The level of difficulty of the content was appropriate.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not Applicable

10. This professional development provided me with research-based content reading instructional strategies to improve students' academic achievement of content specific standards.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not Applicable

11. In regards to this course, the content presented was helpful to improve my instructional knowledge of content area reading instruction.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not Applicable

12. As a result of this course I will increase the use of reading instructional strategies in my content instruction.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Not Applicable