

**AN ANALYSIS OF SECONDARY SCHOOLS AND PRINCIPALS' NEEDS TO
IMPLEMENT LITERACY INSTRUCTION ACROSS THE CONTENT AREAS**

by

Marguerite Imbarlina

Bachelor of Arts, Washington & Jefferson College, 2003

Master of Education, University of Pittsburgh, 2005

Submitted to the Graduate Faculty of
The School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Education

University of Pittsburgh

2014

UNIVERSITY OF PITTSBURGH

School of Education

This dissertation was presented

by

Marguerite Imbarlina

It was defended on

February 24, 2014

and approved by

Dr. Rita Bean, Professor Emeritus, Instruction and Learning

Dr. William Bickel, Associate Professor, Administrative and Policy Studies

Dr. Charlene Trovato, Associate Professor, Administrative and Policy Studies

Dissertation Advisor: Dr. Cindy Tananis, Associate Professor, Administrative and Policy
Studies

Copyright © by Marguerite Imbarlina

2014

AN ANALYSIS OF SECONDARY SCHOOLS AND PRINCIPALS' NEEDS TO IMPLEMENT LITERACY INSTRUCTION ACROSS THE CONTENT AREAS

Marguerite Imbarlina, Ed.D.

University of Pittsburgh, 2014

As student achievement data continues to reveal that adolescents are not prepared for the literacy demands of college and the workplace, a national reform movement to improve the content and rigor of literacy standards in secondary schools is driving educational change in the United States. The literacy standards require the leadership of administrators to support the implementation process. In Pennsylvania, secondary school leaders are responsible for preparing their schools to implement the PA Core standards for reading and writing in history, social studies, science, and technical subjects. This research study addressed the current capacity for secondary schools to implement components of a school-wide comprehensive literacy plan and the professional development needs of secondary principals to implement the new literacy standards. Data collected from the Keystone to Opportunities (KtO) Local Literacy Needs Assessment from 319 school districts and 10 charters schools by the Pennsylvania Department of Education was analyzed. Additionally, qualitative data was collected from interviews with five secondary principals from Southwestern Pennsylvania. The findings of this study suggest that the majority of secondary schools do not have a comprehensive literacy plan. Additionally, principals recognize their need for professional develop to implement, support, and supervise literacy across the content areas. However, principals are unaware of the opportunities available to improve their understanding of the literacy standards and other state mandates are prioritized ahead of the new standards.

TABLE OF CONTENTS

PREFACE.....	XIII
1.0 INTRODUCTION.....	1
1.1 STATEMENT OF THE PROBLEM.....	4
1.2 RESEARCH QUESTIONS.....	5
1.3 DEFINITION OF TERMS	5
2.0 REVIEW OF LITERATURE	7
2.1 THE CURRENT STATE OF ADOLESCENT LITERACY EDUCATION .	7
2.2 COMMON CORE STATE STANDARDS AND PA CORE STANDARDS	11
2.3 LITERACY COMPONENTS OF THE COMMON CORE	13
2.3.1 Reading Text Complexity.....	13
2.3.2 Disciplinary Text.....	17
2.3.2.1 Science.....	18
2.3.2.2 Social Studies and History.....	19
2.3.2.3 Math	20
2.3.3 Reading Skills.....	21
2.3.4 Language.....	25
2.3.5 Motivation and Engagement.....	27
2.4 STRIVING READERS COMPREHENSIVE LITERACY PROGRAM	28

2.4.1	Pennsylvania’s Comprehensive Literacy Plan	30
2.4.2	Keystones to Opportunity (KtO)	32
2.5	COMPONENTS OF EFFECTIVE SECONDARY LITERACY PROGRAMS.....	34
2.6	PROGRAMS THAT SHOW PROMISE.....	38
2.7	THE ROLE OF SECONDARY ADMINISTRATORS	42
2.7.1	Instructional Leadership	42
2.7.2	Leading the Implementation of the PA Core Standards.....	45
2.7.3	Building School Culture	47
2.7.4	Building Teacher Capacity.....	48
2.7.4.1	Pre-service Education for Teachers	49
2.7.4.2	In-Service Professional Development for Teachers	50
2.7.4.3	Content of Professional Development for Teachers.....	54
2.7.5	Professional Development Needs of Principals	56
2.8	CONCLUSION	61
3.0	METHODOLOGY.....	63
3.1	STATEMENT OF THE PROBLEM.....	65
3.2	RESEARCH QUESTIONS.....	66
3.3	CONCEPTUAL FRAMEWORK.....	66
3.4	METHODOLOGY AND PROCEDURES	71
3.5	SAMPLE.....	75
3.6	DATA COLLECTION.....	76
3.7	DATA ANALYSIS AND REPORTING.....	79

3.8	PERSONAL SIGNIFICANCE AND POTENTIAL BIAS	80
3.9	LIMITATIONS.....	82
3.10	CONCLUSION	84
4.0	DATA ANALYSIS AND FINDINGS.....	85
4.1	DEMOGRAPHIC INFORMATION	86
4.2	PERCEIVED CURRENT CAPACITY FOR SECONDARY SCHOOLS TO IMPLEMENT LITERACY INSTRUCTION.....	92
4.2.1	Standards and Curriculum	92
4.2.2	Assessments	94
4.2.3	Instruction	99
4.2.4	Professional Learning and Practice	103
4.2.5	Literacy Leadership, Goals, and Sustainability	109
4.3	VARIATION OF CONTENT LITERACY UNDERSTANDING AMONGST PRINCIPALS.....	114
4.4	PERCEIVED PROFESSIONAL DEVELOPMENT NEEDS OF SECONDARY PRINCIPALS	116
4.4.1	Better Identification of the Components of Effective Literacy Instruction 117	
4.4.2	Knowledge of PA Core Standards for Literacy	119
4.4.3	Confidence in Providing Teachers with Professional Development on Literacy Instruction	121
4.4.4	Development of Processes for Affecting Cultural Change.....	125

4.5	PRINCIPAL AND SCHOOL PREPARATION FOR THE IMPLEMENTATION OF SECONDARY LITERACY STANDARDS IN THE CONTENT AREA	132
4.5.1	No Current Preparation for the Implementation	132
4.5.2	Professional Development for Literacy is Not a Focus.....	135
4.6	SUMMARY OF DATA ANALYSIS AND FINDINGS.....	138
5.0	CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH	140
5.1	OVERVIEW OF THE STUDY	140
5.2	CONCLUSIONS	141
5.2.1	Research Question 1	141
5.2.2	Research Question 2	143
5.2.3	Research Question 3	145
5.2.4	Summary of Findings	146
5.3	IMPLICATIONS FOR PRACTICE AND POLICY.....	146
5.4	RECOMMENDATIONS FOR SECONDARY PRINCIPALS' PROFESSIONAL DEVELOPMENT.....	151
5.5	SUGGESTIONS FOR FURTHER RESEARCH	153
	APPENDIX A	155
	APPENDIX B	158
	APPENDIX C	159
	BIBLIOGRAPHY	161

LIST OF TABLES

Table 1. Alignment of Variable from the KtO Local Literacy Needs Assessment and Research	73
Table 2. Alignment of the Interview Questions to the Study and Research	78
Table 3. Contextual Information about the Principals Interviewed.....	87
Table 4. Description of Standards and Curriculum Criteria of the LLNA	93
Table 5. Frequency Distribution of High Schools’ Use of Standards and Curriculum from the LLNA.....	94
Table 6. Description of Assessment Components for Criteria A and B of the LLNA	95
Table 7. Frequency Distribution of High Schools’ Use of Assessment for Criteria A and B of the LLNA	95
Table 8. Description of Assessment Component for Criteria C and E of the LLNA	96
Table 9. Frequency Distribution of Assessment for Criteria C and E of the LLNA	97
Table 10. Description of Assessment Components for Criteria F of the LLNA	98
Table 11. Frequency Distribution of Assessment for Criteria F of the LLNA.....	99
Table 12. Description of Instruction Components for Criteria A of the LLNA	100
Table 13. Frequency Distribution of High Schools’ Use of Instruction for Criteria A of the LLNA.....	100
Table 14. Description of Instruction Components for Criteria B of the LLNA	101

Table 15. Frequency Distribution of Instruction for Criteria B of the LLNA	101
Table 16. Description of Instruction Components for Criteria C and G of the LLNA.....	102
Table 17. Frequency Distribution of Instruction for Criteria C and G	103
Table 18. Description of Professional Learning and Practice Components for Criteria A of the LLNA.....	104
Table 19. Frequency Distribution of High School Professional Learning and Practice for Criteria A of the LLNA.....	105
Table 20. Description of Professional Learning and Practice Components for Criteria B of the LLNA.....	105
Table 21. Frequency Distribution of High School Professional Learning and Practice for Criteria B of LLNA.....	106
Table 22. Description of Professional Learning and Practice Components for Criteria C of the LLNA.....	107
Table 23. Frequency Distribution of High School Professional Learning and Practice for Criteria C.....	108
Table 24. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria A of the LLNA.....	109
Table 25. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria A.....	110
Table 26. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria B of the LLNA	110
Table 27. Frequency Distribution of Literacy Leadership, Goals, and Sustainability for Criteria B.....	111

Table 28. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria C of the LLNA	112
Table 29. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria C	112
Table 30. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria D of the LLNA	113
Table 31. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria D	113
Table 32. Themes about Principals’ Perceived Professional Development Needs	117
Table 33. Summary of Findings.....	139

PREFACE

It is with sincere appreciation and love that I thank my mom and dad, Rose and Marco Imbarlina, for continuing to support and encourage me while I pursue my dreams. They have never given up on me, even when I was ready to give up on myself. Their tenacious work ethic and confidence in our ability to succeed has always been an inspiration to my three siblings and me.

I am particularly grateful for the support of Dr. Tananis and the members of my study group. They helped me through the process of developing my research study and writing my findings. The stressful work was often alleviated by the comfort of being at Dr. Tananis' house surrounded by empathetic, supportive colleagues. Additionally, I want to thank the members of my committee who dedicated their time to reading and refining my study: Dr. Bean, Dr. Bickel, and Dr. Trovato.

I also want to thank my mentor, colleague, and friend, Jeff Finch. He listened to my ideas and helped me refine them; he read and edited my writing; he challenged me to think more deeply; and above all, he encouraged me to finish writing my paper.

Finally, I want to thank Rosina and Nino Sciulli, my beautiful, loving babies, and Ben Sciulli. They patiently sacrificed their time while I endlessly wrote, attended study group, and interviewed principals. Watching my children “play Pitt” with my research and sleep at my feet to support my efforts of writing at night encouraged me to quickly finish the study—I love you Rosina and Nino!

1.0 INTRODUCTION

As world, national, and state student achievement data continues to report that secondary students in the United States (U.S.) are not reading at grade level or ready for the demands of college and or the workplace, instructional leaders will have to rethink how literacy instruction is implemented at the secondary level (U.S. Department of Education, 2011). The National Assessment of Educational Progress (NAEP) exam of 2008 concluded that the reading “skills and abilities demonstrated by...17-year-olds at different levels have not changed significantly in comparison to 2004 or 1971 [exam results]”(U.S. Department of Education, 2009, p. 12). About 94 percent of 17-year-olds were unable to “extend and restructure the ideas presented in specialized and complex texts. Examples include scientific materials, literary essays, and historical documents” (U.S. Department of Education, 2009, p.12). Additionally, the 2008 NAEP results suggest that 61% of 17-year-olds are unable to “find, understand, summarize, and explain relatively complicated information” from literary and informational passages (U.S. Government, 2009, p. 12). Moreover, the College Board (2011) reports that SAT scores have steadily declined since 1972 from average verbal scores of 530 to 497, respectively. Accordingly, reading researcher Jeanne Chall and her colleagues concluded that the test passages used on the SAT are actually easier today than from tests administered from 1947-1975 (Adams, 2011).

Conley (2007) reports about 40% of college students are enrolled in a remedial course because they are not ready for the rigorous course load college mandates. Specifically, students are not prepared to handle the voluminous amounts of reading and writing assigned in the courses. Research findings suggest that college courses require students to read eight to ten books in the same time that a high school class requires only one or two (Standards for Success, 2003). Furthermore, students are also required to write multiple papers in short periods of time in all subjects. These papers must be well reasoned, well organized, and well documented with evidence from credible sources (National Survey of Student Engagement, 2003, 2004, 2006). Yet, students are not leaving high school with the necessary writing skills to meet the high expectations of colleges.

The adolescent literacy crisis has not gone unnoticed by national educational leaders. After many years of collaborating and researching international education standards, the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) composed the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (CCSS). The CCSS are an “extended, broad-based effort to fulfill the charge issued by the states to create the next generation of K-12 standards in order to help ensure that all students are college and career ready in literacy no later than the end of high school” (NGA & CCSSO, 2010a). Additionally, the CCSS are rigorous and based on research, evidence and international benchmarks, and are aligned with expectations of both college and work (NGA & CCSSO, 2010a).

The creation and implementation of the CCSS in literacy is an attempt to address the adolescent reading crisis our nation is facing. However, the new standards are based on the ability of content teachers to implement disciplinary literacy instruction. Although the issue of

refining reading and writing across the secondary curriculum is somewhat addressed in research, quality professional development provided to teachers for basic pedagogical techniques of teaching reading in the content areas is limited at best. While many content teachers at the secondary level do not consider themselves reading teachers, almost all secondary teachers rely on their students' ability to read assigned content specific texts to fulfill curriculum goals (Jacobs, 2008; Moje, 1996). Additionally, most teacher education institutions in the U.S. require the inclusion of a literacy methods course in teacher preparation programs, yet classroom researchers rarely observe teachers or students utilizing the strategies (Moje, 1996). Moje (1996) argues that many teachers, both pre-and in-service, are focused on presenting content material, so literacy strategies are perceived as interferences with content instruction.

Furthermore, the directive to carry out the implementation of literacy instruction across the curriculum is associated with the responsibility of school administrators. As the person chiefly responsible for the operations of the school, the high school principal's responsibility to supervise and evaluate literacy instruction across the curriculum also presents challenges for a majority of principals. Many principal preparation programs provide limited opportunities for principals to hone the skills needed to espouse school reform of this magnitude (Hess & Kelly, 2005; Walpole & McKenna, 2011). Many principals will need specific professional development to help them understand how to adopt and supervise a school-wide literacy program. Principals need training to develop effective professional development and methods for empowering and supporting teachers through the change of their instructional practice (Foley, 2001; Walpole & McKenna, 2011). Although the CCSS have been developed and disseminated to all educational institutions, the support necessary for building principals to implement the new standards has not been widely addressed in the literature.

1.1 STATEMENT OF THE PROBLEM

The Pennsylvania Department of Education (PDE) decided to use the CCSS in July 2010; however there was controversy surrounding their decision. Legislators and PDE decided to align the PA state standards with the CCSS, but to call the new standards the PA Core Standards (PAC). The PACS reflect the content and rigor of the CCSS, but they maintain the organization of previous Pennsylvania state standards. Moreover, the State Board decided to use the Common Core State Standards appendices as resources to support the new PA Core Standards for reading and writing in the content areas. It is the responsibility of the building principal to supervise and support the high school's transition to the new literacy standards; however, many principals have the same level of content knowledge in adolescent literacy as the teachers they supervise, so the adoption of school-wide literacy standards could be problematic for many principals who do not have established resources or support systems to implement this level of reform. This study is important because it assesses the level of high schools principals' preparedness to implement a national reform movement. Additionally, the data gleaned from this study could assist researchers and professional development coordinators as they continue to generate more efficient and effective programs to support the efforts of principals to increase adolescent reading achievement. Furthermore, the data could potentially influence pre-teacher and pre-administrator programs at the university level to include literacy instruction in its course curricula.

1.2 RESEARCH QUESTIONS

More information on how schools are addressing the implementation of the PA Core Standards for literacy is necessary for added support of this important school reform movement. The following research questions were addressed in this study:

1. What is the current capacity of secondary schools to implement components of a school-wide comprehensive literacy plan?
2. What are the perceived professional development needs of secondary principals to implement the Pennsylvania Core Standards for literacy in the content areas?
3. How are secondary principals preparing themselves and their schools to implement the Pennsylvania Core Standards for literacy in the content areas?

1.3 DEFINITION OF TERMS

The following terms are defined as they apply to this study.

Secondary Schools: For the purposes of this study, the term secondary schools references high schools that include grades 9-12, senior high schools that include grades 11-12, intermediate high schools that include grades 9-10, and junior high schools that include grades 7-12.

Building Level Principals: Building level principals are responsible for the overall operations of the school, which include the alignment of standards based instruction, teaching, and curriculum.

Literacy—the level of reading and writing skills that learners need in an academic subject to comprehend and respond to ideas and texts used for instructional purposes (Brumley, 2010; Shanahan & Shanahan, 2008; Torgesen et al., 2007). Content literacy uses reading, writing, speaking, performing and other modes of “symbolic communication” (Alvermann, 2002, p.190) to support students while they learn information and think critically in various disciplines that are situated in specific social, cultural, historical and institutional contexts and engaged in for specific purposes relative to those contexts (Moje, Dillon, & O’Brien, 2000; O’Brien, Stewart, & Moje, 1995; Shanahan & Shanahan, 2008).

Literacy Practices—literacy practices are defined as actual uses of literacy within a school, which could include curriculum, instruction, and assessment practices with literacy components; a school-wide literacy framework; professional development for literacy, etc.

Literacy Resources—Literacy resources include both material and human resources related to literacy, including, but not limited to sources of data, reading programs, instructional coaches and personnel.

PA Core Standards—For the purposes of this study, the PA Core Standards refers to the PA Common Core Standards for English Language Arts, PA Core Standards for Reading and the PA Core Standards for Writing in History/Social Studies and Science/Technology.

2.0 REVIEW OF LITERATURE

The review of literature addresses the current state of literacy instruction in the secondary school and the new standards that are influencing high school curriculum and instruction for literacy. Additionally, the literature review presents research to support the components of an effective literacy program. Finally, the literature review focuses on the role of administrators to implement effective adolescent literacy instruction.

2.1 THE CURRENT STATE OF ADOLESCENT LITERACY EDUCATION

The current state of adolescent literacy education was influenced by the International Reading Association's (IRA) position statement on adolescent literacy. The IRA argued:

No one gives adolescent literacy much press. It is certainly not a hot topic in educational policy or priority in schools. In the United States, most Title I budgets are allocated for early intervention—little [is] left over for the struggling adolescent reader. Even if all children [do] learn to read by Grade 3, the literacy needs of the adolescent reader [are] far different from those of primary-grade children. (Moore, Bean, Birdyshaw, & Rycik, 1999, p.1)

After the IRA's statement, a litany of reports, research agendas, government policies, and other programs started to bring the issue of adolescent literacy reform to the forefront.

The IRA's 1999 position statement on adolescent literacy sparked a necessary discussion about adolescent literacy. From the late 1990s to today, many college textbooks and other reading resources increasingly use the term *literacy* in their titles and focus on different aspects of literacy education (Jacobs, 2008). However, one element of literacy education remains true: there is not one program or method that effectively meets the needs of all adolescent learners (Biancarosa & Snow, 2006; Kamil et al., 2008; Torgesen et al., 2007). In fact, many researchers have found key characteristics of effective reading programs, but none claim to have found a single program that would be effective in every school (Biancarosa & Snow, 2006; Kamil et al., 2008; Torgesen et al., 2007). The integration of literacy education and support at the high school level varies across schools based on many variables, such as demographics, economic stability, and needs of students.

Although adolescent literacy is at the forefront of many discussions concerning high school reform, the majority of high schools do not implement specialized curricula or adequate support for adolescent students' literacy development (Kamil et al., 2008; Sturtevant, 2003). However, some schools are beginning to investigate and implement valuable programs to improve adolescent literacy with the help of continued staff development through the employment of a literacy coach or secondary reading specialist (Sturtevant, 2003). The leadership that literacy coaches provide helps support content area teachers implement and utilize reading instruction to improve students' ability to read, write, and succeed in content courses (Sturtevant, 2003). Moreover, depending on how committed a district is to establishing an effective reading program, literacy coaches can lead literacy teams; guide teachers in using appropriate strategies; coordinate with teachers and administrators; and act as expert teachers that others can access for support (Sturtevant, 2003). Although literacy coaches can be effective

in helping teachers improve their practice, some barriers still exist with supporting adolescent students' literacy development.

Primarily, researchers have found that some teachers do not require students to read complex texts. The teachers usually adjust their assignments or methods of presenting content, rather than providing students with strategies to navigate disciplinary texts (Kamil et al., 2008; O'Brien, Moje, and Stewart, 2001). Additionally, some content teachers are not properly trained to provide literacy instruction in the content area that they teach, so they offer resistance when asked to provide students with additional help to read content text (Kamil et al., 2008; O'Brien, Moje, and Stewart, 2001). As previously mentioned, some content teachers believe it is the responsibility of the literacy coach, reading specialist, and or special education teacher (when applicable) to provide any type of content literacy instruction. Likewise, researchers have found that some content teachers' immediate focus is on covering the content of the curriculum, that they are unaware that including content literacy instruction could actually help students have a deeper and more thorough understanding of the content because students could independently cover material more efficiently (Kamil et al., 2008; O'Brien, Moje, and Stewart, 2001). These barriers exist in many schools with different levels of intensity, but nonetheless, they bar students from high level literacy instruction.

In 2002, the Institute for Learning at the University of Pittsburgh introduced the Disciplinary Literacy Framework to help transform the practice of literacy instruction. The work done by the Institute for Learning encouraged schools and content teachers to infuse specific reading and thinking strategies with content inquiries into their lessons to "engage students in the habits of reading, writing, speaking, and thinking that would help them develop content

knowledge and disciplinary literacy skills” (McConachie & Petrosky, 2010, p. x). The five disciplinary literacy principles of the Disciplinary Literacy Framework include the following:

- Knowledge and thinking—and therefore literacy development—must go hand in hand.
- Learning is apprenticeship.
- Teachers mentor students as apprentices.
- Classroom culture socializes intelligence.
- Instruction and assessment drive each other. (McConachie & Petrosky, 2010, p. x)

The framework highlights the duality of secondary instruction—literacy instruction and content knowledge are not independent of each other. The Disciplinary Literacy Project allowed researchers from the University of Pittsburgh to collaborate with teachers and administrators from over twenty-five school districts to help transform content instruction to include a more comprehensive approach to content and literacy instruction.

Currently, the Common Core State Standards are acting as a catalyst for the improvement of reading instruction for adolescent students. As mentioned in the introduction of this paper, the new standards address the need for all adolescents to read complex texts that they will find in college and the workplace (NGA & CCSSO, 2010a). The Common Core defines a model for determining text complexity and the skills students need to comprehend complex texts. Additionally, the NGA & CCSSO (2010a) recognize:

Students’ ability to read complex text does not always develop in a linear fashion...Students reading well above and well-below grade-band level need additional support...Even many students on course for college and career readiness are likely to need scaffolding as they master higher levels of text complexity. (p. 9)

These realizations from the authors of the Common Core support the need for better adolescent literacy instruction in high schools across the nation.

2.2 COMMON CORE STATE STANDARDS AND PA CORE STANDARDS

In 2010, the Common Core State Standards (CCSS) were released in the areas of English language arts and mathematics. Although not all states have adopted the standards, the majority of states have adopted a version of them (Porter, McMaken, Hwang, & Yang, 2011). Porter, McMaken, Hwang, and Yang (2011) report that the CCSS differ from the original state standards in four ways:

1. They provide shared expectations and consistency across the nation for curriculum and assessment.
2. They provide a clearer focus to encourage more depth and less breadth in explicit content instruction.
3. They increase efficiency with the development of content standards, assessments, curriculum materials, and professional development across the nation.
4. They are internationally benchmarked. (p. 103-104)

Additionally, the CCSS demand higher levels of cognitive ability from students compared to the state standards.

Currently, the greatest change to high school curriculum comes in the form of the Common Core standards for English language arts and literacy in history/social studies, science, and technical subjects (“the standards”). The standards “represent qualitatively different outcomes and their accomplishment will require significant shifts in educational practice involving teachers across the curriculum” because of the demand for all students to read and use more challenging texts, develop academic lexicons, and use texts to support their writing (IRA Common Core State Standards Committee, 2012, p. 4). The standards are focused on preparing students to read and comprehend independently and proficiently the kinds of complex texts

commonly found in college and careers to narrow the gap between many high school seniors' reading ability and the reading requirements they will face after graduation (NGA & CCSSO, 2010a).

However, the new standards recognize that all teachers are responsible for developing students' literacy skills in different areas of the curriculum; the responsibility is no longer solely the role of the ELA teacher (NGA & CCSSO, 2010b). As mentioned before, the focus on student readiness for college and the work place has motivated the interdisciplinary approach to literacy so that students are able to independently and proficiently read and comprehend informational texts (NGA & CCSSO, 2010b). The move to an interdisciplinary approach to literacy creates new challenges for teachers and school administrators as they begin to implement the new standards, revise curriculum and instructional pedagogy, and administer more challenging assessments.

According to the Pennsylvania Department of Education's (PDE) Standards Aligned System (SAS) website, the State Board of education adopted the Common Core State Standards (CCSS) in July 2010, and then made the decision to draft standards that mirror the content and rigor of the CCSS using the organization of the current Pennsylvania Academic Standards format. Although the new standards are modeled after the CCSS, they are unique to Pennsylvania and are known as the Pennsylvania Core Standards (PDE, 2013).

Currently, the SAS website has the following draft versions of new state standards for secondary education listed: PA Core—English Language Arts, Grades 6-12; PA Core—Mathematics, Grades PreK-12; PA Common Core—Reading for Science and Technical Subjects 6-12; PA Core—Writing for Science and Technical Subjects; PA Common Core—Reading for History and Social Studies; and PA Core—Writing for History and Social Studies. The website

includes a document titled “PA Core—Common Core—PA Academic Standard Crosswalk,” which was designed to “assist educators as they align curriculum to PA Core. The alignments are primarily based upon content, as rigor from one standard to another may vary” (PDE, 2013). Beginning in July 2010, districts across Pennsylvania have started the transition process to the new standards, with July 1, 2013 as the tentative target date for full implementation of the PA Core.

2.3 LITERACY COMPONENTS OF THE COMMON CORE

The standards include anchors for reading, writing, speaking and listening, and language; however, this literature review includes information focused on reading and language.

2.3.1 Reading Text Complexity

Secondary content area courses utilize complex texts that require students to effectively utilize advanced levels of literacy. As mentioned above, adolescent literacy goes well beyond the skills of decoding and fluency; students must have prior background knowledge of the subject material and strategies to read a variety of texts (Alvermann, 2002; Biancarosa & Snow, 2006; Fang & Schleppegrell, 2010; Torgesen et al., 2007). Accordingly, students must develop the skills to comprehend and think critically about numerous types of text covering a wide-range curriculum. Fang and Schleppegrell (2010) acknowledge that the strategies elementary students are taught and use in reading instruction are not sufficiently meeting the demands of secondary students

because secondary texts are structured differently, and students should develop different methods of handling the new language; however, strategies for reading secondary texts are not explicitly taught through the high school curriculum. Most teachers at the secondary level identify themselves as content teachers, experts in educating students on the content of their discipline, not reading teachers who help students access the content through content literacy skills.

Additionally, the development of literacy skills is hierarchical; the basic literacy skills at the foundation of a student's literacy development are necessary to reach the pinnacle of disciplinary literacy skills. Students should have basic reading skills to develop the literacy skills necessary to access content specific texts. At the primary levels of education, texts follow natural speech patterns and resemble "story-telling language with which students are familiar" (Fang & Schleppegrell, 2010, p. 589). As students begin to read to learn, the texts utilize more technical language, abstract vocabulary, and complex sentence structures (Jacobs, 2008). Shanahan and Shanahan (2008) posit that the basic and intermediate literacy skills students utilize are necessary for students to read content area texts, but disciplinary literacy skills, which specialize in strategies to extrapolate specialized texts, are necessary for students to comprehend and utilize content area texts. Moreover, Shanahan and Shanahan (2008) state that:

the high level skills and abilities embedded in these disciplinary or technical uses of literacy are probably not particularly easy to learn, since they are not likely to have many parallels in oral language use, and they have to be applied to difficult texts (p. 45).

Students are unable to learn disciplinary or technical literacy skills without some explicit instruction.

As previously mentioned, high school teachers recognize themselves as content teachers, not reading teachers, and therefore incorporate very few opportunities for students to learn explicit techniques to render text (O'Brien et al., 1995). Additionally, researchers have concluded that:

Often middle and high school teachers view themselves as content specialists. They sometimes ignore the problems of their struggling readers or compensate for them by giving students notes from a reading assignment or reading a text aloud instead of helping students learn to extract information from a text themselves. These teachers do not have the training or knowledge to do more, and they are often frustrated that remediation services are less available and less effective for their struggling adolescent students than they are for struggling younger readers. (Berman and Biancarosa, 2005, p. 8)

These findings suggest that necessary instruction for adolescent readers is not provided through secondary instruction, even though content teachers are aware of reading deficiencies among their students.

Reading materials used in secondary schools share the common characteristic of presenting themselves as challenges through their use of specialized academic structures and language; additionally, the different content areas “create, disseminate, and evaluate knowledge” (Shanahan & Shanahan, 2008, p. 48) in various ways according to their discipline, which creates even more issues for adolescent readers. Furthermore, content area texts employ various uses of language (Moje 2008), and the reading students do in elementary school does not prepare them for the “literary works, historical documents, scientific explanations, and mathematical problems that challenge secondary school students” (Fang & Schleppegrell, 2008, p. 4). The strategies and

skills students need to be successful in various areas of the secondary curriculum depend on the discipline they are studying and the skills they have honed in earlier years. In addition, students need to continue to develop skills at the secondary level to actively read content texts to learn new concepts. Content literacy is more than the acquisition of reading strategies to interpret high school reading; content literacy is the development of various strategies in various disciplines to comprehend and utilize specialized texts.

The standards require that all students are able to comprehend complex texts before they graduate from high school. Their approach to defining text complexity includes three parts: “qualitative dimensions of text complexity; quantitative dimensions of text complexity; and reader and task consideration” (NGA & CCSO, 2010b, p.4). The qualitative dimension measures the level of “meaning or purpose; structure; language conventionality and clarity; and knowledge demand” (NGA & CCSO, 2010b, p. 4). In essence, the qualitative component measures the ease at which a reader can make meaning of the content. The quantitative component measures the “word length or frequency, sentence length, and text cohesion” of a text (NGA & CCSO, 2010b, p.4). Although sections of a text can be evaluated for quantitative complexity using numerous formulas, such as the Frye Readability Calculator, evaluating a whole text is typically measured with the help of technology. The final aspect of text complexity centers on how the reader engages with the text. In particular, it measures the reader’s motivation, the complexity of the task assigned to the reader, the reader’s prior knowledge, and the reader’s ability to understand the purpose of reading the text (NGA & CCSO, 2010b).

The standards also include text complexity grade bands that are associated with lexile scores. The lexile ranges listed in the standards has increased from prior lexile ranges associated with grades 6-12. For example, students in the grade band 6-8 should read text with a

complexity lexile range of 955-1155; students in the grade band 9-10 should read text with a complexity lexile range of 1080-1305; and students in the grade band 11-College/Career Ready should read text with a complexity lexile range of 1215-1355. The standards also address that “students’ ability to read complex text does not always develop in a linear fashion” (NGA & CCSO, 2010b, p. 9); therefore, students who are reading well above and well below grade level might require scaffolding to help support their individual reading needs. Especially since most of the textbooks used in content area courses consist of a high lexile range.

2.3.2 Disciplinary Text

Students need to develop specialized literacies for each content area if they are to succeed in secondary and post-secondary schooling. However, to do this, teachers play a role in creating opportunities for their students to develop critical literacy skills that help them “engage with, reflect on, and evaluate specialized and advanced knowledge” (Fang & Schleppegrell, 2008, p. 9). Reading proficiency in the content areas develops when students are able to identify and utilize how language works in disciplinary texts. Shanahan (2009) studied how experts read text to analyze the challenges of content texts, and she found that the areas of vocabulary, comprehension, fluency, and writing were approached differently for each discipline. Additionally, the approach of the content experts was germane to their discipline and based on the demands of the text. Students should be presented with the opportunity to learn to read like content experts in various disciplines to allow them to fully access the secondary curriculum and content information.

2.3.2.1 Science

Science reading materials deal with highly specialized topics and are constructed in a technical way. They contain heavy loads of subject-specific vocabulary that students must first be able to recognize and define in order to understand scientific concepts (Fang & Schleppegrell, 2010; Shanahan, 2009). In addition, science texts, much like math texts, are challenging for adolescent readers because they move from different kinds of textual and informational (graphs, diagrams, models, equations, etc.) material and students must be able to transfer information from one form to another (Shanahan, 2009). Moving between textual and informational material requires students to make connections between specific information and generalized concepts; however, this skill is not explicitly taught in upper level science courses. For example, a biology textbook might include a diagram for photosynthesis, but students need the skills to read the construction of the diagram, scientific vocabulary, and any mathematical explanation of the process to fully comprehend the various stages of the process.

Furthermore, the language used in science texts is challenging for readers outside of the field of science. Fang and Schleppegrell (2010) have concluded that sentences in science area texts contain “clauses that form long noun phrases” that densely compact information to present biological processes (p. 589). Additionally, nouns originated from verbs (nominalizations) occur most often in explanations and reports so that technical terms can be defined or used to summarize an explanation sequence (Fang & Schleppegrell, 2010). The language patterns in science enable the development of chains of reasoning that are technical and dense, which do not follow a natural pattern of language (Fang & Schleppegrell, 2010). They require students to consciously connect new ideas and processes to retain new concepts. Additionally, science texts have a high degree of lexical density, which means there is a much higher number of content

words than natural clauses, which increases the level of reading difficulty for students (Shanahan & Shanahan, 2008). Students should be able to automatically define the dense vocabulary words as they read the text to maintain a consistent rate of fluency to comprehend the information presented in the text. The reader should also be able to transform the information to workable material through the use of visual representations, such as formulas, diagrams, charts, graphs, etc. (Shanahan & Shanahan, 2008). It is not enough for a student to be able to read the words from a science text; he or she should be able to define the dense vocabulary, transform the information into visual depictions, utilize informational displays to make sense of text, and deconstruct nominalizations that hold valuable pieces of conceptual information.

2.3.2.2 Social Studies and History

Nonfiction texts used in social studies and history courses are populated with abstract language that is also a challenge for secondary students. To further complicate the analysis of social studies texts, there are two types of information used within the discipline: history and social sciences. History courses use qualitative information that needs analyzed for authorial bias, whereas, the social sciences use quantitative information that might rely on mathematical literacy. Much like science texts, social studies texts include specific vocabulary and generalized terms; however, the texts also include historical vocabulary pertinent to specific time periods (Shanahan, 2009). Fang and Schleppegrell (2010) recognize that social studies texts utilize technical terms, much like science, but they also are saturated with nominalizations “such as willingness, conviction, ingenuity, provision, the ease, failure, belief, and effectiveness” (p. 589). The use of nominalizations helps present processes and qualities as tangible items, which helps create abstract language (Fang & Schleppegrell, 2010). Fang and Schleppegrell (2010) contend that nominalizations help authors package events into terms, “to ascribe judgment, to infuse

perspectives, to efface agency, to quantify concepts, and to expand information” (p. 589). However, students must have the necessary strategies to unpack the nominalizations to make meaning of the text.

Historical texts offer accounts and interpretations of the past through loaded phrases and nominalizations that present various messages. Students must be able to discern the messages, evaluate historical texts for bias, and synthesize the information from both primary and secondary texts to form an interpretation. They also need to be keenly aware that they are reading an historian’s interpretation of historical events through a specific perspective, and that the historian’s account is not the absolute historical truth (Shanahan & Shanahan, 2008), especially since texts that teachers use in social studies courses are varied. Shanahan (2009, p. 244) theorizes that adolescent readers are developing analytical skills to synthesize the various documents in order to recognize that historians “construct cause-effect claims based on evidence,” and once students are able to evaluate historians’ depictions of historical events, they too can construct history based on their analyses and interpretations of the texts they read.

2.3.2.3 Math

Much like science and social studies texts, mathematical text presents its own challenges. For example, mathematical texts require students to read with precision to make meaning of each word to specifically understand the purpose of the text. Mathematical texts utilize two languages that require students to utilize different strategies when working with mathematical information: natural language and mathematics symbolic language (Fang & Schleppegrell, 2010; Shanahan & Shanahan, 2008). Mathematics symbolic language comes in the form of graphs, symbols, diagrams, etc., which are condensed bodies of information that inform students how to manipulate numbers (Fang & Schleppegrell, 2010). Therefore, students are required to utilize

technical words and symbols for specific mathematical processes. In Shanahan and Shanahan's (2008) study, mathematicians emphasized the two most important strategies that they utilize while reading math texts: close reading and rereading. Mathematicians use these two strategies because all words, even words that act as "function" words, are important for making meaning of text. Mathematicians in Shanahan and Shanahan's (2008) study reiterated that symbols, letters, and quantitative words have specific meanings in some texts, but their meaning can change as variables change, so understanding their meaning is essential in order to understand their purpose. These strategies focus on the analysis and synthesis of texts. Students should also have the ability to identify the various meanings of everyday words that take on new meaning in mathematical texts, such as the words area and faces (Fang & Schleppegrell, 2010). Mathematical texts rely on the synchronous use of technical, dense, and symbolic language that is discipline specific. Students should have the strategies and awareness of how to access mathematical texts to use the information to better their understanding of mathematical concepts.

2.3.3 Reading Skills

Although disciplinary text presents problems for most students, the development of disciplinary literacy skills can enable readers to gain access to challenging texts. The basic skills taught to beginning readers include decoding words to encode sentences to create meaning, but these skills are not enough for adolescent readers to make meaning of content text. Moje et. al (2004) identify that "being literate in a content area also requires some basic processing skills, such as decoding and encoding, as well as the ability to comprehend ideas in a text by linking them with or connecting them to one's own ideas about the phenomenon" (p. 45). Many of the reading processes young readers deliberately use to make meaning of text become automatic as readers

mature (Hynd-Shanahan & Shanahan, 2008), but the skills necessary to comprehend complex texts should be refined as readers mature. The standards address the “Reading Foundational Skills” for grades K-5, but they do not address the reading skills that adolescents should *maintain* while reading complex texts.

Reading Fluency

Reading fluency might not increase in high school, but students should increase the range of words they can quickly distinguish in order to continue to meet grade-level expectations of reading fluency. Therefore, students need practice reading to maintain and increase the acquisition of large numbers of words to keep pace with grade level texts, especially since grade level texts get increasingly harder each year because they include a litany of infrequent and subject specific words (Torgesen et al., 2007). Torgesen et al. (2007) theorize that:

For reading practice to contribute to growth in reading fluency, students must be able to identify the new words they encounter in text (words they cannot recognize in a single glance) with reasonable accuracy when they first encounter them. The most efficient way for readers to identify an unknown word in text is to analyze its phonological or morphological parts to link them to a known word that is part of their general vocabulary, and to confirm their guess by considering whether the newly identified word makes sense in the context of what they are reading. (p. 7)

Although reading fluency is not explicitly taught in high school courses, reading fluency is a major skill adolescents need to read complex texts.

Comprehension

Comprehension, which requires students to repurpose the information they read, is another developmental skill students need to understand and use content text. Garner (1987) posits that in-depth text comprehension requires readers to be responsive to their cognitive performance and internal inconsistencies and potential conflicts between their existing knowledge and new knowledge they encounter with content text. To comprehend challenging texts, students must regulate their reading performance to improve comprehension (Alexander & Fox, 2011; Baker & Carter-Beall, 2009). This means that students should be able to identify when they need to re-read text, create connections to retain the information, and or ask for assistance to help them make meaning of the material. The ability to regulate reading comprehension while actively reading becomes increasingly automatic as readers mature (Alexander & Fox, 2011). Additionally, research (Adams, 2011) shows that prior domain knowledge is more influential in identifying a student's ability to comprehend or to learn from advanced texts than the student's knowledge of making inferences and using comprehension strategies. When students can connect prior experiences and learned knowledge to new knowledge, they are able to better support, retain, and use the information.

Cognitive Skills

Cognitive skills or strategies are also necessary components of literacy that students need to work with content texts. Dole, Nokes, and Dritis (2009) define cognitive strategies as “mental routines or procedures for accomplishing cognitive goals like solving a problem, studying for a test, or understanding what is being read” (p. 348). Furthermore, they define meta-cognitive strategies as “routines and procedures that allow individuals to monitor and assess their ongoing performance in accomplishing a cognitive task” (Dole et al., 2009, p. 348). In short, metacognition is the theory that readers think about reading to complete the actual cognitive task

of reading. Good readers are able to make hypotheses about their interpretation of the text while they read and check that their interpretations are correct by comparing the new information with prior knowledge (Dole et al., 2009). This ability to manage various ideas or representations for students continues to develop into adulthood and may develop differently across different domains of knowledge (Hynd-Shanahan & Shanahan, 2008). The development of these processes relies on “executive control and conscious attention” (p. 209) to the text students are reading, which is influenced by the instructional practices of the teacher. Hynd-Shanahan and Shanahan (2008) note that with the difficulty of reading tasks increasing, cognitive processes must simultaneously work to “flexibly coordinate multiple sources of information to form complex, coherent mental representations” (p. 210). Effective readers are able to continue to process information until a breakdown in comprehension is recognized, and then they are able to identify a strategy to help overcome the difficulties they are having with the text (Dole et al., 2009).

Additionally, throughout adolescence, students undergo biophysical and cognitive changes, which increase their capacity for self-regulation, abstract, logical, and multidimensional thought, and working memory (Alexander & Fox, 2011). The cognitive changes influence their ability to comprehend inferential and elaborative text, recognize and use text structure, and build understanding across multiple texts (Alexander & Fox, 2011). While students plan and monitor their comprehension, they must also detect and correct errors in their comprehension, which is part of executive functioning (Baker & Carter-Beall, 2009). Ineffective monitoring of comprehension while reading is associated with poor comprehension (Baker & Carter-Beall, 2009).

Students need to make meaning of text beyond basic comprehension; therefore, students need both interpretative and rhetorical skills to successfully access content text (Moje et al., 2004). Moje et al. (2004) argue:

that being literate in a content area requires an understanding of how knowledge are constructed and organized in the content area, an understanding of what counts as warrant or evidence for a claim, and an understanding of the conventions of communicating that knowledge. (p. 45)

Students should be able to identify how authors develop text with information to present major ideas, and they must also have the interpretative skills to analyze implicit messages that are created with the help of rhetoric. Indeed, the skills adolescents need to master content texts varies for each academic subject. Although secondary students can be fluent readers, they still require direct instruction to learn how to learn from text. Jacobs (2008) argues that “beyond decoding and fluency skill, differences in later grades between better and poorer readers are most apparent in their ability to apply the skills of independent reading” to learn from text (p.14).

2.3.4 Language

The standards “take a hybrid approach to matters of conventions, knowledge of language, and vocabulary” (NGA & CCSO, 2010b, p. 28); therefore, many elements of language development are woven into reading, writing, and speaking and listening. The standards recognize that the rules and application of grammar and language skills need to “re-taught and relearned as students advance through the grades” (NGA & CCSO, 2010b, p. 29). Additionally, the acquisition of vocabulary is a component of the language anchors. The standards use Isabel Beck, Margaret McKeown, and Linda Kucan’s three-tiered vocabulary framework (2002). Tier one words are

used in everyday speech; tier two words appear in writing more than in speech, and they “often represent subtle or precise ways to say relatively simple things—saunter instead of walk”; and tier three words are specific to a disciplinary domain (Beck, McKeown, Kucan, 2002; NGA & CCSSO, 2010b, p. 33). Knowledge of tier two and tier three words makes complex texts more accessible to students; therefore, vocabulary development is a very important part of the standards.

Research indicates that students must comprehend at least 95% of the words in a text for comprehension and that written language utilizes a larger lexical range than oral language (Adams, 2011). According to Adam’s (2011) analysis of George Zipf’s law, “every natural language sample is made up of relatively few words that recur over and over again, and many, many words that arise very infrequently” (p. 6). Therefore, adolescent readers should have an understanding of more words to make meaning of challenging text; however, in order to develop a broader vocabulary, students should read higher-level texts so that they are exposed to more words (Adams, 2011). Nagy, Herman, and Anderson (1985) conclude that the most effective means of developing a reading vocabulary is through the process of inferring the meaning of new words in the context of the reading material. Additionally, Nagy and Anderson (1984) contend that students, who have knowledge of word parts (morphemes), are able to identify meaning of words regardless of prefixes, suffixes, or compounds. The more exposure and experience with discipline specific words, the more students will be able to use the vocabulary to fluently read content specific text.

2.3.5 Motivation and Engagement

Beyond literacy skills, cognitive skills, and knowledge of the constructs of disciplinary texts, students need intrinsic and extrinsic motivation to help them engage with content texts. Torgesen et al. (2007) argue that the decline in motivation has two fatal consequences on the growth of adolescent reading proficiency. First, students who are not motivated to read or interested in what they are assigned to read do not read as much as those who are more motivated (Torgesen et al., 2007). As mentioned above, to improve reading fluency, vocabulary development, and comprehension, adolescents should practice reading. Without motivation, students are less likely to practice reading, which compounded over time makes it increasingly harder for them to read complex texts. The second consequence is that students are less engaged and actively reading if they are not motivated to read. Students are more likely to use different cognitive strategies to make meaning of what they are reading if they are motivated to read the text (Torgesen et al., 2007).

The needs of adolescents to read complex texts are multi-faceted and intricate. Students need literacy skills, cognitive skills, an understanding of the differences between disciplinary texts, and motivation in order to read complex content material. However, each student's intensity of need in the various areas differs, so supports and programs to prepare students to work with complex content materials also must vary. Biancarosa and Snow (2006) address the broad needs by saying:

Ensuring adequate ongoing literacy development for all students in the middle and high school years is a more challenging task than ensuring excellent reading education in the primary grades, for two reasons: first, secondary school literacy skills are more complex, more embedded in subject matters, and more multiply determined; second, adolescents

are not as universally motivated to read better or as interested in school-based reading as kindergartners. (p. 2)

As this statement implies, school-level programs to address the improvement of adolescent literacy skills should involve elaborate supports and programs to safeguard success for all. The literacy components of the Common Core State Standards create a great demand on states attempting to implement them into their schools. The federal government has acknowledged the need for literacy instruction at the secondary level, which has served as a catalyst for funding through the Striving Readers Comprehensive Literacy Program (SRCLP).

2.4 STRIVING READERS COMPREHENSIVE LITERACY PROGRAM

The Striving Readers Comprehensive Literacy (SRCL) program is a federal program aimed at funding comprehensive literacy programs for students from birth through grade 12. The program was authorized in 2010 under Title I (Part E, Section 1502 of the Elementary and Secondary Education Act) (U.S. Department of Education, 2013). The Elementary and Secondary Education Act (ESEA) provided \$200 million to fund “comprehensive literacy development and education program[s] to advance literacy skills” (U.S. Department of Education, 2013). The money was used for formula grants and discretionary grants.

The formula grants were awarded to 48 State Education Agencies (SEAs) to support states’ efforts in creating a comprehensive statewide literacy program. The discretionary grant, which constituted \$183 million, was awarded to six out of the 29 states that applied, including Georgia, Louisiana, Montana, Nevada, Pennsylvania, and Texas to “boost implementation of the

new ELA standards by fostering the individual and collective responsibility of educators for improving students' literacy achievement through research-based literacy instruction and interventions" (Haynes, 2011, p. 8). States used the money to create sub-grants for local school districts to "provide students with explicit, systematic, and developmentally appropriate instruction in reading and writing, including vocabulary development, reading comprehension, and the use of diverse texts" (Haynes, 2011, p. 8). The goal of the SRCL grant is to move literacy to the forefront of education to support the implementation of the Common Core standards, improve low-performing schools, improve teacher effectiveness, and provide a system of support for English language learners and students with disabilities.

According to Haynes (2011) in her policy brief, the SRCL program is effective because it focuses on job-embedded, ongoing professional learning that is research based. The professional learning targets literacy instruction with the understanding that "teachers need extended opportunities to observe, receive feedback, and reflect with others on how to interact with students in ways that deepen their understanding of a subject area by connecting thinking and understanding with strategic reading and effective writing" (Haynes, 2012, p.8). Additionally, states are developing systems to ensure that "the quality and depth of assigned student work is consistent with the ELA state standards" (Haynes, 2012, p. 9). The goal is to build capacity through the use of literacy and subject-area specialists translating the standards into "instructional frameworks and tools that integrate literacy into course work, providing prototypes for student literacy tasks, and delivering access through online platforms" (Haynes, 2012, p. 9).

The Pennsylvania Department of Education (PDE) was awarded approximately \$38 million dollars to move forward with the Keystones to Opportunity: Pennsylvania's Vision for Sustainable Growth in Reading Achievement, which is projected to serve over 50,000 students

and 6,000 teachers from 2011 until 2016. The grant application included three main “keystones”: improve literacy learning, implement data-based decision-making, and integrate digital technology into instruction. The plan included the following elements to improve literacy in Pennsylvania:

LEAs partnering with early childhood education providers to develop a comprehensive and coherent literacy plan that spans birth through grade 12; annual data retreats for administrators and teachers, innovation incentive awards for high-performing subgrantees; confidential summative student data portals; and the use of the Standards Aligned System portal as a “one stop” for literacy support. (U.S. Department of Education, 2013)

Furthermore, the Keystones to Opportunity proposal included two nationally recognized evaluation organizations to conduct quantitative and qualitative research to measure the results of implementing the plan. The two organizations are the Collaborative for Evaluation and Assessment Capacity (CEAC) at the University of Pittsburgh and SAS EVAAS, Inc. for K-12.

2.4.1 Pennsylvania’s Comprehensive Literacy Plan

The Pennsylvania’s Comprehensive Literacy Plan (PaCLP) was funded through the SRCL formula grant money allocated to states to develop a birth to grade 12 comprehensive literacy plan. As stated in the plan, the “PaCLP is meant to serve as a basis for professional development that will assist schools in developing a comprehensive, aligned, and coherent literacy plan” (PDE, 2012). The plan begins with five guiding principles: literacy as a critical foundation; culture and learning; meeting needs of all students; evidenced-based instruction; and high quality

teaching. Each of the guiding principles is thoroughly explained and aligned to references that educators can use to develop a better understanding of the material.

The six essential elements of literacy instruction are also presented along with a rationale and suggested practices for each of them. The first element focuses on the creation of a “Coherent, Articulated Literacy Program” that includes information for students birth to age 5, grades k-5, and grades 6-12 in the areas of reading, writing, speaking and listening, and language (PDE, 2012). Furthermore, the first element includes notable features of the Common Core State Standard and how they apply to the PaCLP. The second essential element is “Oral Language,” which also focuses on the rationale and implications for student birth to age 5, grades k-5, and grades 6-12. The third essential element is “Assessment,” which focuses on the implication and types of assessment to improve literacy instruction across grades and content areas. The fourth essential element is “Engagement and Resiliency.” In addition to outlining the implications for engagement and resiliency across different age groups, the PaCLP also includes various resources for educators to improve student engagement with literacy. The fifth element is “Differentiation,” which applies to implication for differentiation, Universal Design for Learning, and Response to Instruction and Intervention (RtII). Finally, the last essential element centers on “Disciplinary Literacy” for secondary and elementary students. Specifically, the element outlines the disciplinary needs for literacy instruction in English Language Arts (ELA), math, science, and social studies.

The PaCLP ends with information on how to implement and assess the implementation of a literacy plan within a school. The Striving Readers Leadership Team developed the implementation plan, and it includes actions, deliverables, accountability measures for the implementation, and a time frame for implementation. The appendix provides information on

how to develop an assessment plan and how to cycle through assessment to monitor and improve the implementation of a literacy plan. Additionally, the appendix includes information on how to create and run data teams.

2.4.2 Keystones to Opportunity (KtO)

The PaCLP served as the framework for the state’s proposed Keystones to Opportunity (KtO) grant application for the SRCL funding. The goal of the KtO is to improve literacy outcomes for student birth through grade 12 across the state of Pennsylvania through the implementation of a comprehensive literacy program. PDE (2011) defines a “comprehensive approach to literacy development” as one that:

requires an integrated, aligned and inclusive set of literacy experiences throughout a child’s school career. Activities align to an evidence-based learning framework that specifies the content of literacy as well as the processes by which all stakeholders involved in literacy instruction can facilitate that learning in a coherent and consistent manner.

All 500 school districts and charter schools across the commonwealth were eligible to apply for sub-grant money through an application process.

The application process included a two-phase application dependent on data and data analysis (PDE, 2013). The local educational agencies were responsible for discussing their literacy needs using Pennsylvania System of School Assessment (PSSA) data and Pennsylvania Value-Added Assessment System (PVAAS) data and an analysis of their self- identified needs and a plan for continuous growth (PDE, 2013). The initial pre-application process included the

completion of the Keystones to Opportunity Local Literacy Needs Assessment (KtO LLNA), which was developed based on research and best practices (PDE, 2013).

In order to complete the Local Literacy Needs Assessment, interested districts were responsible for establishing a Literacy Planning Team consisting of educators who work with students at various levels: birth-age 5, elementary, middle, and high school (PDE, 2013). After completing the needs assessment on an individual basis, the team members then discussed their findings and established consensus on areas of strengths and needs at all four levels of education. The Local Literacy Needs Assessment included seven components to evaluate: standards and curriculum, assessments, instruction, professional learning and practice, literacy leadership, goals, and sustainability, transition, and partnerships (PDE, 2013). Each of the components included “strategies and actions recommended to support implementation of the district-level framework” with various indicators and a four-point ordinal scale for educators to rate their district’s current literacy programs. The assessment also included questions for the team to prioritize the areas for improvement for each of the statutory areas and each of the components of the PaCLP. The teams identified district data from the AYP Report Card and PVAAS; additionally, pertinent demographic data for each of the schools in the district was used to evaluate the districts’ capacity to implement a comprehensive literacy plan. Near the end of the document, the Literacy Planning Teams were also given the opportunity to present perceptual and contextual data relevant to the district. Finally, the local needs assessment asks the team to decide on applying for district-wide or targeted schools and/or program funding (PDE, 2013). Of the 500 school districts in Pennsylvania, 319 and 10 charter schools completed the Local Literacy Needs Assessment, which created a “wealth of data [PDE] now [has] about the literacy needs of Pennsylvania’s school districts and early childhood programs” (PDE, 2013). Of the

329 local educational agencies that completed the first phase of the grant process, 149 were invited to submit a full application, and 58 were awarded the grant (two districts declined the award).

Evaluators at the Collaborative for Evaluation and Assessment Capacity at the University of Pittsburgh analyzed data from the 329 school districts. In a general overview of the results, PDE (2013) posted that early childhood and high schools have the lowest capacity to support a comprehensive literacy plan, and that when the components were further broken down, PDE (2013) reported that schools have the greatest capacity for assessment and the least capacity for transition. They learned that “when it comes to literacy, each of the statutory areas tends to work in silos with little or no understanding of what is happening at other parts of the literacy continuum” (PDE, 2013).

2.5 COMPONENTS OF EFFECTIVE SECONDARY LITERACY PROGRAMS

In an effort to better understand elements of effective literacy instruction at the high school level, panels of reading researchers and experts have collaborated to provide recommendations that school leaders can utilize to develop school wide programs. Biancarosa and Snow (2006) describe fifteen elements that help support effective adolescent literacy programs in “Reading Next: A Vision for Action and Research in Middle and High School Literacy.” The elements are further divided into two sub-groups: instructional improvements and infrastructure improvements.

The first nine elements are focused on instructional practices; however, the sustainability of such practices is often dependent upon infrastructural improvements. Biancarosa and Snow

(2006) posit that the implementation of comprehension instruction, instruction embedded in content, motivation, collaboration, tutoring, diverse texts, writing, technology, and formative assessment will help improve adolescent literacy. The use of comprehension strategies to address adolescent literacy should be direct, explicit and varied, and teachers should explain “to students how and when to use certain strategies...[and] have students employ them in multiple context with texts from a variety of genres and subject areas” (Biancarosa & Snow, 2006, p. 14). Content teachers are not expected to be reading teachers, but they are expected to use available resources, such as literacy coaches and language art teachers, to develop and implement strategies that help their students “read and write like historians, scientists, mathematicians, and other subject-area experts” (Biancarosa & Snow, 2006, p. 15). While inspiring students to read and write as experts in specific content areas, students must be engaged in the instruction to maintain momentum to improve.

To motivate students to grow as adolescent readers, teachers can implement a myriad of strategies that will help improve student reading. Biancarosa and Snow (2006) suggest that activities that bring students together to work with text are effective; however, it is important for teachers to “provide scaffolding for engagement at every ability level in the class and promote better oral language and content-area skills by giving the students concrete problems to discuss or solve” (p. 17). The texts should be diverse, and teachers should expect students to use writing to connect with them. Furthermore, the integration of technology is also a beneficial instructional practice; it is “both a facilitator of literacy and a medium of literacy” (Biancarosa & Snow, 2006, p. 19). If instructional strategies alone are not helping students improve their ability to read text, students should have the opportunity to participate in tutoring that focuses on individualized student needs and is offered during and or after the school day (Biancarosa &

Snow, 2006). Teachers should use daily formative assessment to evaluate individual student needs in order to adjust instructional strategies and to make appropriate recommendations for tutoring (Black & Wiliam, 1998; Biancarosa & Snow, 2006).

Beyond what teachers do instructionally, the infrastructure of the school must also support content literacy. For example, traditionally high school students spend about forty minutes in an English course per day, but to help implement more effective strategies as mentioned above, the panel established by Biancarosa & Snow (2006) found that students need two to four hours of “literacy-connected learning daily” (p. 20), which means principals should arrange for extended literacy time through literacy instruction in other content area classes. Additionally, long term and ongoing professional development is needed for teachers to efficiently and appropriately integrate strategies during extended literacy time (Biancarosa & Snow, 2006). Professional development can be structured through interdisciplinary teams of teachers who use ongoing summative assessments of students and programs to continually improve content-literacy instruction (Biancarosa & Snow, 2006).

To implement the instructional and infrastructural elements outlined above, the last two elements Biancarosa and Snow (2006) include in their analysis is the implementation of strong leadership from the building principal and the integration of a comprehensive and coordinated literacy program. Instructional leadership from the principal is illustrated through his or her commitment to learning how adolescents learn to read and write and attending professional development sessions organized primarily for teachers (Biancarosa & Snow, 2006). Also, the building principal’s commitment should be seen in his or her effort to align schedules so that interdisciplinary teams of teachers can meet on a regular basis “to coordinate their instruction to

reinforce important strategies and concepts” (Biancarosa & Snow, 2006, p. 22) and support one another.

Biancarosa and Snow (2006) recognize that there are factors that limit (eg. Funding, staff, contracts, etc.) the ability of schools to implement all fifteen elements; furthermore, they have not concluded what the optimal mix of elements would be to improve adolescent literacy. However, they stress that “without professional development, ongoing formative assessment of students and ongoing summative assessment of students and programs as the foundation of any...program, we cannot hope to effect major change in adolescent literacy achievement, no matter what instructional innovations are introduced” (Biancarosa & Snow, 2006, p. 29). Based on individual student and school needs, school leaders should determine the combination of elements they implement in their literacy program.

Kamil et al. (2008) produced a practice guide of recommendations to improve adolescent literacy for the Institute of Education Sciences. The panel recommended five elements of an effective program and research to support the implementation of each element:

1. Provide explicit vocabulary instruction.
2. Provide direct and explicit comprehension strategy instruction.
3. Provide opportunities for extended discussion of text meaning and interpretation.
4. Increase student motivation and engagement in literacy learning.
5. Make available intensive and individualized interventions for struggling readers that can be provided by trained specialists. (Kamil et al., 2008, p. 7)

The researchers recognize that the list is not exhaustive, but they support their recommendations based on the fact that each are reinforced with substantial research. Furthermore, Kamil et al. (2008) explain that they do not recommend “teaching students about the discourse patterns of

specific subjects that adolescents study” because there is not enough research to formally support it (p. 8), but that does not mean it is an ineffective element of a reading program. Similar to Binacaro and Snow’s report, Kamil et al. (2008) stress the importance of professional development in reading for content area teachers. Although Kamil et. al (2008) do not recommend content-specific strategy instruction in their list of recommendations, they posit that professional development should focus on the skills needed for students to successfully read content-area texts.

Finally, Marchand-Martella, Martella, Modderman, Petersen, and Pan (2013) organized recommendations for adolescent literacy instruction into five areas based on the synthesis of research reviews and meta-analyses. The five areas include: word study, fluency, vocabulary, comprehension, and motivation (Marchand-Martella, Martella, Modderman, Petersen, & Pan, 2013). The researchers advocate for explicit instruction in the key areas listed above, and place the responsibility of the implementation of reading instruction on the educators working with the students in content areas (Marchand-Martella et al., 2013). Furthermore, the researchers reference Biancarosa and Snow’s (2006) list of the 15 essential elements of effective literacy programs and couples it with the five areas they list to improve student achievement (Marchand-Martella et al., 2013).

2.6 PROGRAMS THAT SHOW PROMISE

There are varying approaches to reading instruction to improve student achievement. According to Slavin, Cheung, Groff, and Lake (2008), they can be grouped into one of four categories: “(1) reading curricula, (2) mixed-method models, (3) computer-assisted instruction, and (4)

instructional-process programs” (p. 292). Although reading curricula varies across schools, there is very little research on the effect of the curricula on student achievement. In fact, Slavin et al. (2008) note in their research that too few evaluations of secondary reading textbooks and secondary reading curricula have been conducted to adequately assert whether or not there is a curricula that positively effects reading achievement for adolescents. Therefore, the programs discussed in this section will focus on mixed-methods models, computer-assisted instruction, and instructional process programs as Slavin et al. (2008) coded them.

Mixed-Method Models

Mixed-method models are intended to serve as complete literacy interventions, and they incorporate small-group, large group, and individual instruction, along with computer assistance (Slavin et al., 2008). Slavin et al. (2008) concluded that Read 180, a mixed-method model developed by Vanderbilt University, showed moderate evidence of improving student reading achievement. Read 180 begins with a 20 minute whole-group shared-reading and skills lesson, and then students rotate through three 20 minute stations: small group instruction with a teacher using a skills book that includes nonfiction and fiction, independent reading with the option to listen to modeled reading, and computer-assisted instructional reading. Finally, the lesson ends with a 10-minute whole group closure activity. Moreover, Read 180 is aligned with the Common Core Standards, the Alliance for Excellent Education and the Carnegie Corporation’s best practices for writing, and the International Center for Leadership in Education’s recommendations for secondary school reform (Scholastic Research and Evaluation, 2006). The research of Slavin et al. (2008) concludes that over the studies they analyzed, Read 180 positively effected student achievement. Moreover, the U.S. Department of Education (2012)

released an evaluation of reading programs used with the Striving Readers project, which concluded “there was a statistically significant impact on the reading achievement of struggling readers in grades 6-9 after one year of exposure to Read 180” (p. 60).

Computer Assisted Instruction

Computer assisted instruction (CAI) is “designed to supplement traditional classroom instruction by providing additional instruction at students’ assessed levels of need” (Slavin et al., 2008). Slavin et al. (2008) concluded that there was moderate evidence that the CAI program Jostens was effective as a secondary reading program. Jostens is now called Compass Learning, and it provides teachers with “an extensive set of assessments, which place students in an individualized instructional sequence, and students work individually on exercises designed to fill in gaps in their skills” (Slavin et al., 2008, p. 298). The program is used for 15-30 minutes, two to five days a week. Although there is moderate evidence that Jostens can effect reading achievement, Kulik (2003) and Slavin et al. (2008) conclude that research does not support the use of CAI as an independent program to improve reading in secondary schools. Therefore, CAIs can supplement a program, but school leaders should be wary about using CAI as an independent means for improving reading across the curriculum.

Instructional-Process Program

Slavin et al. (2008) define instructional-process programs as “methods that focus on providing teachers with extensive professional development to implement specific instructional methods” (p. 301). They believe two instructional-process programs show promise: Reading Apprenticeship Academic Literacy (RAAL) and Xtreme Reading. Both reading programs use teaching strategies that help students development cognitive skills, such as metacognition, sustained silent reading, and language study, to independently comprehend text across the

curriculum. Through RAAL and Xtreme Reading, teachers and students participate in daily “modeling, practice, paired practice, independent practice, differentiated instruction, and integration and generalization” (Slavin et al., 2008, p. 306) of reading. Somers and fellow researchers (2011) conclude in their evaluation of the impact of supplemental literacy courses for struggling ninth-grade readers, that both programs “improved students’ reading comprehension skills and helped [students] perform better academically in their high school course work” (p. viii). However, Slavin et al. (2008) conclude that there is insufficient evidence to support either program as effective for improving secondary reading. In a response to the conclusion made by Slavin et al. (2008) regarding RAAL, Greenleaf and Petrosino (2009), employees of WestEd the makers of RAAL, argue in a letter to the editor of *Reading Research Quarterly* that there is great “folly” in “looking for one best solution when we know that what educators need is an array of tools and approaches and the information and capacity to choose these tools and approaches based on the particular needs of particular learners and circumstances” (p. 353).

As previously mentioned, researchers and educators are able to generalize a list of effective practices for improving secondary students’ reading skills, but no one program or method is foolproof. Furthermore, the research concludes “in almost all cases, doing something to build literacy proficiencies for students in middle and high schools turns out to be better than doing nothing” (Greenleaf & Petrosino, 2009, p. 353). The lists outlining elements of an effective reading program mentioned above could help building principals begin to frame a school-wide literacy program.

As Bean (2004) stated in her book *The Reading Specialist*, “We can improve literacy instruction in our schools” (p. 123). Principals can begin to create and implement literacy programs that meet the needs of their students through thoughtful planning. Furthermore, Bean

and Dagen (2011) include a rubric that school leaders can use to evaluate current methods for addressing literacy instruction within their building, and if literacy instruction is not occurring, the rubric is a useful tool to identify the criteria needed to promote school literacy learning. Furthermore, the KtO LLNA is also a resource principals can access to evaluate their building's current capacity to implement a comprehensive literacy plan and to address the areas of needed support.

2.7 THE ROLE OF SECONDARY ADMINISTRATORS

Secondary administrators are charged with the responsibility to manage the facilities, personnel, and pupils within their building; however, the most important aspect of their job is to lead the instructional framework to improve student achievement. Although teachers are recognized as the most important factor in student success, principals are responsible for building capacity for teachers to improve their practice every year. What principals do, whether it is through implementing professional development, improving infrastructure, building relationships, changing school culture, and or focusing on instruction and assessment, matters when it comes to leading school reform.

2.7.1 Instructional Leadership

Secondary administrators need to allocate time to act as instructional leaders of their building and academic program. Instructional leadership is necessary to implement and sustain an effective adolescent literacy program; however, many instructional leaders use their time

conducting classroom observations and or directly coaching teachers rather than on organizational management for instructional improvement (Horng & Loeb, 2010). Brumley (2010) suggests that literacy should be an administrator's focus because it is a "vehicle for whole-school improvement and, from a humanistic standpoint, a moral obligation to fulfill" (p. 207). Cotton (2003) posits that effective instructional leaders are involved in the curricular and instructional decisions that affect student achievement; therefore, they do not merely act as managers of a building, but help prioritize what is being taught and how it is being taught.

According to the National Association of Elementary School Principals (2001) the majority of a principal's time should be allocated to instruction. Additionally, instructional leaders are "well informed of scientifically based reading research and effective reading instruction in order to assist in the selection and implementation of instructional materials and to monitor implementation" (U.S. Department of Education, 2005, p. 1). Moreover, instructional leaders champion the use of standards based education reform to ensure all students are meeting high expectations and competencies to aid in their success in college and the workplace. The NAESP (2001) also recognizes that instructional leaders focus on improving achievement by using multiple sources of information to assess student performance. The data are used not only by the principal, but also by instructional coaches, teachers, and students to improve achievement. Finally, instructional leaders create a culture of learning for all faculty members, and support teachers while they are continuing to learn and implement new strategies in the classroom. An instructional leader is able to integrate the traditional skills of a principal, which include teacher evaluation, budgeting, and maintaining the facilities, and a connected involvement with the teaching and learning that is taking place in the building, which includes

aligning curriculum, developing professional development opportunities for teachers, and monitoring student achievement (Elmore, 2000; Spillane, Halverson, & Diamond, 2000).

Stein and Nelson (2003) argue that instructional leaders must have more than leadership skills; they should also have “leadership content knowledge” (p.424). Their research concludes that to “improve teaching and learning...administrators must be able to know strong instruction when they see it, to encourage it when they don’t, and to set the conditions for continuous academic learning among their professional staff” (p. 424). The principal is responsible for knowing where expertise exists within the faculty, so that the human resources available to aid instruction are used to make learning happen (Stein & Nelson, 2003). Stein and Nelson (2003) posit that the principal’s role is not to act as a transmitter of knowledge, but as a leader responsible for:

- (a) understanding the learning needs of individuals; (b) arranging the interactive social environments that embody the right mix of expertise and appropriate tasks to support learning; (c) putting the right mix of incentives and sanctions into the environment to motivate individuals to learn; and (d) ensuring that there are adequate resources available to support the learning. (p. 426).

Essentially, an instructional leader has vision, the capability to lead individuals, content knowledge, and the skill to act as an adult educator. Bean and Dagen’s (2011) research on principals as literacy leaders concludes that principals should think “about the content of professional development, the means of delivering the content, and the importance of developing a climate in which personnel feel valued and are willing to participate in discussions about how to improve student learning” (p. 359). The principal’s ability to build school capacity to improve

literacy instruction across the curriculum is able to occur when schools function as learning communities (Bean & Dagen, 2011).

2.7.2 Leading the Implementation of the PA Core Standards

Principal leadership is a critical part of any school's transition to the PA Core standards. However, little has been done in the state of Pennsylvania to systematically prepare principals to lead the initiative. Principals are responsible for their own self-directed professional development to prepare for the reform movement. State intermediate unit curriculum specialists and webinars, such as the College Board and National Association of Secondary School Principals (NASSP) series for school leadership, are other available resources to prepare principals. Additionally, various journals for administrators and educational agencies have created checklists, surveys, and other guides to help secondary school leaders address their role in the implementation process.

The resources mainly address the respective shifts required by the new standards and methods for building teacher capacity. Achieve and other educational agencies (2013) identified the following five instructional shifts to implement literacy across the curriculum through the new standards: building knowledge in the disciplines (6-12), using a staircase of complexity for text integration, requiring text-based answers, facilitating writing from resources, and integrating explicit academic vocabulary instruction. The role of the principal, as identified by Achieve et al. (2013) is to “both understand the CCSS vision and be willing to put in the hard effort that is required to shift expectations, curriculum, and instruction in their schools” (p. 8).

Basic knowledge of the standards is necessary; however, principals should also be cognizant of the implementation process recommended by education agencies and other experts

(NAESP, 2012). Principals are the key to creating a school culture that promotes academic success through the integration of the new literacy standards. A school-wide literacy initiative is supported by “immediately building teacher capacity, which begins with addressing common misconceptions about literacy instruction” (Achieve et al., 2013, p. 10). Principals should dispel the myth that secondary students do not need reading instruction at the secondary level. Although most students are fluent readers upon entering high school, many students do not have the ability to tackle academic texts that require more than basic reading skills. Additionally, the idea that teachers do not have time to integrate literacy skills should also be dismissed. Disciplinary literacy should be taught in tandem with content material; students need to learn how to learn from content texts. Finally, teachers should recognize that principals do not expect them to be reading teachers; however, the content teacher should directly and explicitly teach the content area language and foundational reading skills.

Another primary role of the principal is to act as the curriculum leader. Jenkins and Pfeifer (2012) argue that “principals don’t need to be curriculum experts, but they do need to lead their schools with full knowledge of the CCSS...[they] can work with their colleagues to facilitate vertical articulation so that the taught curriculum can be seamless in grades K-12” (p. 31). The articulation of the curriculum and subsequent expectations at each grade level must be disseminated to the teachers and overseen by the principal (Achieve et al., 2013; Jenkins & Pfeifer, 2012; NAESP, 2012). The secondary curriculum should address how teachers are using complex texts, informational texts, close reading and text based responses, and writing to teach content material. Furthermore, necessary strategies to lead the changes and implementation of a curriculum that is aligned to literacy instruction relies on focused transition plans that include time lines, coherent professional development, and accountability structures (Jenkins & Pfeifer,

2012). The accountability structure should include measurements of how teachers are using literacy in their instruction and assessment and how it subsequently affects student achievement.

Along with building capacity and leading curriculum to implement the PA Core standards for literacy instruction in the content areas, principals should also be part of the instructional shifts that take place in their school. Literacy instruction in the content areas should engage students with complex text that requires them to extract and employ evidence from text to build knowledge (Achieve et al., 2013). Principals and teachers should work collaboratively to define what student engagement as it applies to literacy instruction. Additionally, various sources (Achieve et al., 2013; Bean, 2004; Stein & Nelson, 2003) suggest that principals can influence literacy instruction by controlling the time teachers spend on literacy instruction, creating opportunities for teachers to work collaboratively, and providing teachers with immediate feedback on literacy instruction after conducting an observation.

After principals evaluate their schools' capacity to implement the new literacy standards, they should also evaluate their ability to lead a change of this magnitude. Instructional leaders should create a self-directed plan to develop their leadership skills and content knowledge to meet the needs of their teachers and students to improve student achievement.

2.7.3 Building School Culture

As administrators begin to develop comprehensive literacy plans for their secondary schools, the culture of the building should be taken into consideration when planning. The balance between the push for change with the school's current culture should be realized—resources should be aligned with priorities, and strategies should be tailored to the magnitude of the change (Waters, Marzano, McNulty, 2003). The task of changing school culture depends on an administrator

who is able to lead change. Fullan (2002) suggests that “Cultural Change Leaders” must possess the following five components to lead in an academic environment: “moral purpose, an understanding of the change process, the ability to improve relationships, knowledge creation and sharing, and coherence making” (p. 17). Principals should recognize their moral obligation to improve the current operation of their school for the success of all students. Most secondary principals can attest to the fact that secondary literacy has not been at the forefront of their work; however, with the advent of the Common Core State Standards and the drive to prepare all students to be college and workplace ready upon graduation, secondary principals are morally obligated to improve secondary instruction within their schools. Administrators should understand the change process; the innovation of implementing literacy across the content areas will require them to help all staff members recognize the urgency, complexity, and potential pitfall of the change (Fullan, 2002). The principal’s role is not to be a literacy content expert, but an expert on how to manage the process of change (Fullan, 2002).

2.7.4 Building Teacher Capacity

The challenges facing education are diverse and ongoing; however, one aspect of education remains the same, the single most important determinant of student success is teacher quality (Darling-Hammond & Bransford, 2005; Ferguson, 1991). Therefore, developing teacher quality is an essential part of improving literacy at the secondary level. Furthermore, the International Reading Association (2010) lists professional learning and leadership as a standard to shape effective reading programs. Addressing the professional needs of secondary teachers begins with recognizing what they have learned in pre-service programs, identifying the current issues

with professional development to cultivate better programs, and integrating the conceptual aspects of content knowledge and disciplinary pedagogy, which relies on content literacy.

2.7.4.1 Pre-service Education for Teachers

Although more than 60 percent of secondary teachers are required to take a content-area literacy course in their teacher education program (Romine, McKenna, & Robinson, 1996), researchers theorize that the integration of literacy instruction strategies in content classes poses a problem for most secondary teachers because the strategies are not aligned with the pedagogy they are taught within their discipline (O'Brien, Stewart, & Moje, 1995, p. 449). Sustained teacher training in the area of content literacy is essential for teachers to improve their pedagogical and curricular practices to increase student achievement in the content areas, but it is not thoroughly taught in pre-service education. However, research from 1960-1995 presents little evidence of what is considered "effective" reading teacher education for pre-service teachers (Anders, Hoffman, & Duffy 2000). The Anders et al. (2000) analysis of multiple research studies reported that pre-service teachers were most influenced by their undergraduate preparation, more so than the curriculum they used during the first year of teaching, which means pre-service education plays a major role in preparing content-teachers to integrate literacy instruction. Fortunately, many pre-service programs are moving away from stand-alone content-literacy courses in favor of programs that integrate content knowledge and literacy knowledge with specific discipline pedagogy to coordinate and align experiences for pre-service teachers to build the foundation of implementation (Anders, Hoffman, & Duffy, 2000; Dillon et al., 2011; Alvermann, 2002). Dillon et al. (2011) suggest that preparing content teachers to teach reading is:

Challenging because it involves much more than an understanding of reading processes and pedagogy applied to content disciplines; rather, it involves an even deeper

understanding of the roles of oral and written language in knowledge production and representation in the disciplines and thus in teaching and learning in these subject areas.

(p. 638)

Regardless of the course or integrated program a teacher experiences in a pre-service program, secondary teachers who teach a content course need professional development to augment their ability to seamlessly integrate content and literacy knowledge through instruction.

2.7.4.2 In-Service Professional Development for Teachers

Traditionally, professional development programs have been presented as one-day workshops that transmit pre-packaged information to teachers based on the assumption that the teachers in attendance are “passive and sometimes resistant learners with deficiencies in knowledge or skills” (Thibodeau, 2008, p. 55). Additionally, these professional development programs, which are often fragmented and short-lived, have shown to accomplish little in terms of energizing sustained school improvement or effective teacher growth (Thibodeau, 2008). Porche, Pallante, and Snow (2012) suggest that a challenge of schools is to “devise professional development that helps teachers incorporate effective elements into their teaching, supports their continued use of them, and then percolates the elements throughout a school and ultimately a district” (p. 650).

Although schools have offered professional development surrounding literacy, the integration of content literacy in secondary curriculum has been basic at best. Too often generic instructional strategies to integrate literacy in the content areas are presented to staff members without the necessary “conceptual understanding and socio-historical contents of disciplinary knowledge and practices generated within disciplines” (Dillon et al., 2011, p. 639). Historically, content literacy has focused on the construction and implementation of strategies that help

students comprehend and gather information from written texts in the content areas (Moje et al., 2004). Students recognize the strategies help them understand the challenging concepts presented in the immediate content text with which they are working, but they do not connect the literacy strategies as part of the content area (Moje et al., 2004). The literacy practices are never truly embedded in the students' understanding of how to access different content information, rather students view the strategies as stand-alone aids for single courses.

The strategies are often structured around the assumption that students should read and write to learn new information, and the processes to do so are usually formatted as guides, graphic organizers, and procedures (O'Brien, Stewart, & Moje, 1995). The understanding that students should be taught how to actively read content text and become aware of metacognition is often absent from professional development workshops (Fang & Schleppegrell, 2010; O'Brien, Stewart, & Moje, 1995; Wilson, Grisham, & Smetana, 2009). Many of the strategies that teachers are instructed to use with students are oriented more toward demonstrating comprehension than learning to comprehend (Fang & Schleppegrell, 2010). The strategies are nonspecific and do not address how information is situated in the specific content areas.

Although pre- and in-service teachers are supportive of utilizing multiple methods of helping students elicit information from content text, they fail to see the usefulness of such strategies for meeting their particular content-instructional goals (O'Brien et al., 1995). Additionally, professional development that focuses on strategies and skills, which are mainstays of elementary reading instruction, does not help students at the secondary level. The elementary grounded instruction fails to address the significant differences in reading demands between elementary and secondary content reading (Fang & Schleppegrell, 2010). Therefore, professional development workshops that are effective for elementary teachers are not

necessarily effective for secondary teachers. Secondary teachers are all too often unable to see that literacy instruction is the responsibility of all content and elective teachers, not just the elementary or language arts teachers (Wilson, Grisham, & Smetana, 2009).

Professional development frameworks are necessary to present teachers with the tools they need to craft instruction that improves student achievement; however, "...classrooms are complex places, and the best teachers are successful because they are thoughtful opportunists who create instructional practices to meet situational demands" (Anders et al., 2000, p. 732; Sailors, 2009). Professional development should help teachers develop the ability to analyze instructional situations when literacy skills are necessary and then in a thoughtful way, construct and implement necessary responses to support student learning (Anders et al., 2000; Hammerness et al., 2005). Desimone, Porter, Garet, Yoon and Birman (2002) conducted a three-year longitudinal study in which they found that professional development with the objective to present specific instructional practices seemed to increase teachers' uses of the specific practices in the classroom; moreover, including opportunities for teachers to actively learn also affected the teachers' instruction. For teachers to attempt instructional change, they need the opportunity to actively use the specific instructional practice within their classroom (Desimone, et al., 2002; Sailors, 2009).

A professional development framework to improve the integration of literacy instruction in the content areas should start with a clear school or district comprehensive literacy plan with clear objectives that is supported by a principal or literacy leader (Bean & Harper, 2004; Hammerness et al., 2005; Wiggins & McTighe, 2006). While presenting a clear objective for the professional development, the teachers' preconceptions and beliefs of literacy and content instruction should be addressed prior to presenting new instructional practices (Hammerness et

al., 2005). Teachers would benefit from a deep foundation of factual and theoretical knowledge; the ability to understand facts and ideas in the context of the framework; and to be able to organize knowledge in ways that facilitate retrieval and action. Therefore, enacting what teachers already know and helping them use metacognitive approaches to instruction to help teachers take control of their own learning and application (Sailors, 2005).

The principles of quality, ongoing professional development have been identified and synthesized in many sources (e.g. Anders et al, 2000; Biancarosa & Snow, 2006; Desimone et al., 2002; Dillon et al., 2011; International Reading Association, 2010; O'Brien, Stewart, & Moje, 1995). In general, these sources represent effective professional development that “focuses on specific learning outcomes for students, embeds teacher learning in the teachers’ practice, is sustained over time, and provides time for teachers to work together on issues important to them and their schools” (Dillon et al., 2011, p. 642). Job-embedded professional development, which allows teachers to work in collaborative groups, is cited in the literature as an important factor in school improvement (Anders et al., 2000; Biancarosa & Snow; Thibodeau, 2008). Additionally, teacher collaboration through professional development for instruction has been correlated to positive changes in teacher practices, higher expectations for students, the willingness to use innovative materials and methods, and improved student achievement (Tschannen-Moran, Uline, Hoy, & Mackley, 2000).

Hammerness and colleagues (2005) posit that professional development should prepare teachers for action using examples or cases that use actual situations that students are likely to encounter, with the goal for teachers to analyze the case for needed information to solve the problem, analyze the problem with other teachers, and then collaborate to create a solution for the problem. This case-based model requires teachers to do more than apply new strategies to

current instruction; teachers must improvise with strategies and other ideas garnered from professional development while tending to the needs of all of their students—this requires systematic thinking (Hammerness et al., 2005; Sailors, 2009). Teachers with metacognitive awareness have developed the habit to “continually assess their performance and modify their assumptions and actions as needed” (Hammerness et al., 2005, p. 376). Furthermore, teachers must continually analyze student achievement and make necessary changes and quick decisions on content representations, contexts, and instructional approaches to reach every student (Hammerness et al., 2005).

2.7.4.3 Content of Professional Development for Teachers

The content of professional development should be tailored to the needs of the school and faculty; however, pedagogical content knowledge should be addressed (the understanding of how to teach content material), which is as important as knowing the content material (Grossman, Schoenfeld, & Lee, 2005). Knowledge of students’ common understanding and misunderstanding is necessary for a teacher to effectively teach a content specific course (Grossman, Schoenfeld, & Lee, 2005). It is not enough for content teachers to merely identify common misunderstandings among students; they need strategies and instructional methodologies to address the students’ misunderstandings. Leinhardt (1992) conceives that there is “both knowledge of actions and skills and knowledge of concepts and principles,” and to engage students in the process of learning, their task “is to connect strategic action knowledge with specific content knowledge” (p. 20). Therefore, students must hone the necessary skill to access the content information to construct meaning, which includes the necessary literacy skills to access the text. This theoretical understanding should be part of the content information teachers learn during professional development. Moreover, Leinhardt and Young (1996) theorize

that to thoroughly read and use content text, students should have an understanding of how to make meaning of the text and then connect the text with others they have read to make meaning of the material. Students are not done with learning to read once they have acquired basic phonological skills; in fact a content teacher's understanding of the reciprocity between learning to read and reading to learn helps bridge the divide between content knowledge and disciplinary reading skills that students need to learn content material (Jetton & Alexander, 2004).

Fundamentally, teachers should understand that students need both linguistic knowledge and subject-matter knowledge to succeed in the content areas. Linguistic knowledge pertains to the knowledge and skills required to process and use written language (eg. Fluency, phonological ability, vocabulary, text conventions, text structures, etc.) (Jetton & Alexander, 2004). Subject-matter knowledge pertains to prior knowledge of a subject that includes breadth of understanding in a particular domain or knowledge and background relative to a particular topic (Jetton & Alexander, 2004). Working together, linguistic knowledge and subject-matter knowledge help a student construct meaning of new content texts and materials.

However, students must also be cognizant of both general and domain-specific strategies to help them make meaning and apply text in content specific courses (Jetton & Alexander, 2004). General strategies can be applied across content areas, such as predicting, summarizing, and self-questioning (Jetton & Alexander, 2004). Domain-specific strategies do not easily transfer to other domains, especially since the construction of text in the different content areas varies so widely as discussed previously (Jetton & Alexander, 2004). Additionally, teachers should be able to apply surface level strategies when students struggle with comprehension of text and deep processing strategies when students are personalizing or transferring text to something a student generates, such as a diagram or analysis (Jetton & Alexander, 2004).

Jetton and Alexander (2004) argue that the interdependence between knowledge, both linguistic and subject matter, various types and uses of strategies, and the necessity for student motivation is essential for content-area teachers to effectively infuse literacy into their instruction. Additionally, the content a teacher addresses should include a standard concept of the depth of content knowledge to share with students, a clear understanding of the syntax and semantics of the writing within the content domain, and cross-curricular connections to help students anchor the material to other learning (Jetton & Alexander, 2004). The pedagogy should be engaging so that instructional strategies are not routinized, but reflective of what the students need; therefore, a blended use of explicit instruction and participatory approaches to instruction are necessary to achieve discipline-based learning goals (Jetton & Alexander, 2004).

2.7.5 Professional Development Needs of Principals

As the leader of the high school, the high school principal is responsible for implementing a literacy plan and literacy-related professional development for teachers; therefore, another responsibility of secondary administrators is to identify how to establish a quality professional development program. However, a majority of principals need training to develop effective professional development and methods for empowering and supporting teachers through the change of their instructional practice (Foley, 2001; Walpole & McKenna, 2011). Moreover, many principals might benefit from specific professional development to help them understand how to supervise a school-wide literacy program, which includes students, teachers, literacy coaches and or reading specialists, and other personnel. Before a principal can implement an effective literacy program, he or she could identify the needed resources to support his or her

effort. Many principal preparation programs provide limited opportunities for principals to hone the skills needed to implement a school improvement program of this magnitude (Hess & Kelly, 2005; Walpole & McKenna, 2011). Anders and Clift (2011) posit that a team comprised of teachers, the librarian, principal, and a literacy coach should guide a school wide program, but the principal should serve as the “knowledgeable leader that provides the resources and professional development” for the team and faculty (p. 179). Therefore, the professional development needs of principals to implement literacy instruction mirrors those of teachers.

When administrators function as instructional leaders in literacy instruction across the curriculum, they utilize an element of content knowledge expertise that they can utilize to effect change (Stein & Nelson, 2003). Administrators are responsible for developing a culture of trust and collaboration among teachers and staff; moreover, they are responsible for focusing on the improvement of instruction practices. In order to establish credibility and trust among teachers who are indirectly and directly influenced by their peers, an in-depth knowledge of adolescent literacy could aid principals as they begin to lead necessary changes (Stein & Nelson, 2003; Walpole & McKenna, 2011). Stein and Nelson (2003) argue that “as demands increase for them to improve teaching and learning in their schools, administrators must be able to know strong instruction when they see it, to encourage it when they don’t, and to set the conditions for continuous academic learning among their professional staffs” (p. 424). While collaborating with teachers to improve instruction, principals bring an unsubstantiated level of accountability to the reform process by providing professional development for teachers and evaluating and supporting the instructional practices being implemented into practice (Stein & Nelson, 2003). The ability to lead the improvement of teaching and learning of literacy instruction in a school depends on the administrator’s content knowledge (Stein & Nelson, 2003).

Quality professional development for principals use a myriad of comprehensive approaches that are “connected to one another; grounded in both theory and practice; and informed by a coherent view of student learning, teacher development, and school leadership” (Darling-Hammond, Meyerson, LaPointe, & Orr, 2010, p. 84). In their research, Darling-Hammond et al. (2010) theorize that professional development for principals should not only include regular conferences and workshops that focus on curriculum and instruction, but also collaborative cohort visits, peer observations, study groups, and other activities that allow principals the opportunity to share experiences and collaboratively problem solve. McConachie and Apodaca (2010) contend that well-designed and well-run professional learning communities (PLCs) for secondary administrators have the potential to inform principals about the “similarities and differences in driving questions and pedagogical practice” (p. 178). The PLCs have the potential to help build collegiality among administrators to share best practices and co-lead observations “to promote critical examination of disciplinary practices” (Monachie & Apodaca, 2010, p. 179). Additionally, a survey of principals’ perceptions of professional development and its effect on practice highlighted that the majority of principals recognized that the reading of professional books or articles, working with groups of administrators, and the participation in professional development workshops with teachers, were the most helpful activities for school improvement (Darling-Hammond et al., 2010). Much like teachers, principals need a learning continuum that begins in a pre-service program, is mentored at the beginning of the principalship, and maintained throughout in-service opportunities and principal networks (Darling-Hammond et al., 2010).

Administrators also need to encourage large numbers of content-area teachers to integrate literacy instruction into their everyday practice by clearly making the initiative for the school

known to all stakeholders (Biancarosa & Snow, 2006; Jacob, 2008). In order to do this, principals recognize elements of good literacy instruction and support teachers as they begin to change their instructional practice (Irvin, Meltzer, & Dukes, 2007). According to Jacob (2008), whole school improvement in literacy instruction is guided by the following principles:

the roles and responsibilities of content-area teachers must be clear and consistent; Every academic discipline should define its own essential literacy skills; all secondary teachers should receive initial and ongoing professional development in the literacy of their own content areas; and content area teachers need positive incentives and appropriate tools to provide reading and writing instruction. (p. 22)

Although there are many literacy programs districts can utilize, the adolescent literacy program should be a comprehensive effort that is interdisciplinary and interdepartmental and based on the needs of the students in the school (Biancarosa & Snow, 2006). Research conducted by Somers et. al (2010) found that the inclusion of a reading program in a high school improved students' reading comprehension skills and helped students perform better academically in their course work. To implement an effective adolescent literacy program, leadership is needed from the building administrator and personnel who have a solid understanding of how to teach reading and writing to all students (Biancarosa & Snow, 2006).

Although administrators have a number of building level responsibilities, understanding the framework of reading instruction is a pinnacle part of developing a literacy program. The IRA (2010) suggests that school administrators “support reading professionals as they plan, implement, and evaluate effective reading instruction, and provide necessary resources for effective reading instruction” (p. 58). Additionally, the IRA (2010) enjoins administrators to:

...understand the theoretical and evidence-based foundations of reading and writing processes and instruction...use instructional approaches, materials, and integrated comprehensive, balanced curriculum to support students learning in reading and writing...use a variety of assessment tools and practices to plan and evaluate effective reading and writing instruction...create and engage their students in literacy practices that develop awareness understand, respect, and valuing of differences in our society. (p. 58-59)

Furthermore, the IRA (2010) suggests principals complete course work in reading and reading related areas to better support a school-wide literacy program.

Effective literacy instruction in the content areas is supported by the commitment of both teachers and administrators to analyze current practices regarding content-based literacy; identify the needs of teachers to further develop their implementation of content literacy; and facilitate on-going opportunities for professional development. There is a relationship between theory and practice; it is necessary to understand the dichotomy of the two in order to fully implement an effective literacy program at the secondary level (Jacobs, 2008). The school-wide effort to continue to professionally grow aids the integration of strong literacy instruction for students. Research concludes that the development of learning communities within schools is effective in promoting change; however, Bean and Dagen (2011) recognize that there are essential components to establishing effective learning communities. Their first caveat suggests that developing a process of working together is fundamental, and it should be done through “work-related opportunities, where teachers talk about their students, their practices, and assignments, and how working with others can facilitate student learning” (Bean & Dagen, 2011, p. 362). Furthermore, principals should devote “time, commitment, and perseverance” towards the

implementation process and commit to being an “essential member of the team” (Bean & Dagen, 2011, p. 362). Although there are many models of professional learning communities, “there is no one approach to establishing a school as a place of learning” (Bean & Dagen, 2011, p. 362); therefore, principals should evaluate the needs of the school and teachers to effectively meet the needs of the school culture.

2.8 CONCLUSION

The urgency to prepare students to read complex texts independently and proficiently so that they are successful in their pursuit of college and or a career is an integral part of the Common Core State Standards. Pennsylvania secondary administrators are responsible for implementing the PA standards for literacy across the content areas, which calls for major cultural, instructional, and assessment changes in most schools across the state. However, to lead a reform movement of this magnitude, principals should understand the demands of the new standards, which include more complex texts, reading anchors that require students to reason, demonstrate logic, and defend positions using text analysis. Historically, the teaching of reading skills has been the responsibility of the English language arts teachers, but the new standards require all teachers of the secondary curriculum to facilitate literacy instruction in their discipline. Therefore, principals will need a stronger understanding of adolescent literacy: the complexity of content text and effective pedagogy to address potential barriers. Stein and Nelson (2003) posit that “administrators can develop their knowledge...deeply enough in a small but representative slice of knowledge in ...subjects to understand the nature of knowledge, learning, and teaching in that subject” so that they can better support teachers as they implement

literacy instruction across the content areas (p.443). As principals are beginning to develop and implement literacy programs in secondary schools, it is necessary for research to further identify the scope of a principal's ability to build capacity in his or her school and the resources in which he or she is using to implement school reform. Knowledge gained from this analysis could inform further professional development for secondary administrators and teachers to effectively implement literacy across the secondary curriculum.

3.0 METHODOLOGY

This study addressed the preparedness of high schools and secondary principals to implement literacy standards in the content areas. The research questions focused on the capacity of secondary schools in Pennsylvania to implement the components of a comprehensive literacy plan, an analysis of secondary principals' perceived professional development needs to implement the new standards for literacy instruction across the content areas, and a synthesis of how secondary principals are preparing to implement the new standards for literacy instruction across the content areas. The current state of high school preparedness was addressed through data collected by the Pennsylvania Department of Education's (PDE) Keystones to Opportunity Local Literacy Needs Assessment (KtO LLNA). The KtO LLNA enabled participating school districts to evaluate their current capacity to support a comprehensive literacy plan for students age birth to grade 12 based on the following seven components: Standards and Curriculum, Assessments, Instruction, Professional Learning and Practice, Literacy Leadership, Goals, and Sustainability, Transition, and Partnerships. The needs assessment was available to all 500 Local Educational Agencies (LEAs) and charter schools to complete in an effort to earn funding from the Striving Readers Grant; however, only 319 LEAs and 10 charter schools submitted their needs assessment to PDE. Additionally, five principals from Southwestern Pennsylvania were interviewed to gather more detailed information on the professional development needs and self-directed plans of principals as they prepare to lead the implementation of literacy standards across the high school curriculum. Data garnered from the secondary data analysis and

interviews were analyzed to better understand the current state of secondary literacy standards implantation.

3.1 STATEMENT OF THE PROBLEM

Secondary principals are responsible for implementing changes to state standards and assessments in an effort to prepare all students for the continuous pursuit of an education that will prepare them for college and or the workforce. The advent of the Common Core State Standards and now the PA Core Standards has ushered in literacy standards for the content areas, which poses a new challenge for some administrators and schools. Moreover, a reform movement of this magnitude necessitates the need for principals to be knowledgeable about available resources, pedagogy for literacy instruction, and professional development to implement the new standards. This study is important because it addresses the capacity of secondary schools to support literacy instruction and the level of secondary principals' preparedness to implement a state reform movement focused on adolescent literacy. Additionally, data gleaned from this study could assist researchers and professional development coordinators as they continue to generate more efficient and effective programs to support the efforts of secondary schools and principals to increase adolescent reading achievement. Furthermore, data could potentially influence the course work pre-administrator programs offer to those pursuing a career in instructional leadership at the university level, specifically as they begin to address the multiple layers of the principal's role in leading school-wide instruction.

3.2 RESEARCH QUESTIONS

The current state of secondary schools' capacity to implement literacy instruction is necessary in order to address the areas of provision needed to support change in current instructional practices. Additionally, more information on the needs of secondary principals as they undertake the task of implementing new literacy standards in various content areas is also necessary to create and facilitate more effective supports; therefore, this study addressed the following research questions:

1. What is the current capacity of secondary schools to implement components of a school-wide comprehensive literacy plan?
2. What are the perceived professional development needs of secondary principals to implement the Pennsylvania Core Standards for literacy in the content areas?
3. How are secondary principals preparing themselves and their schools to implement the Pennsylvania Core Standards for literacy in the content areas?

3.3 CONCEPTUAL FRAMEWORK

The research design is predicated on the concepts derived from the literature review. The integration of literacy across disciplines to prepare students for college and the workforce requires a comprehensive literacy plan with interdependent components that drive student achievement; therefore, the research design addressed the capacity of high schools to support a literacy plan of this magnitude. Moreover, the secondary administrator is an integral part in

supporting and leading the secondary literacy plan, which requires content and pedagogical knowledge. The research design for this study is structured to address the perceived needs and plans of administrators to fulfill their instructional leadership role.

The first research question addressed the capacity of high schools across the state of Pennsylvania to implement components of a comprehensive literacy plan. The question was addressed through a secondary data analysis of the school districts and charter schools' response to the Keystones to Opportunity Local Literacy Needs Assessment (KtO LLNA) survey tool. The KtO LLNA was generated by the Pennsylvania Department of Education in an effort to award grant money from the Striving Readers Comprehensive Literacy program to support the development of a comprehensive local literacy plan for students from birth through grade 12. As mentioned in the literature review, the state of Pennsylvania was awarded over \$38 million to support the advancement of literacy across the state. Districts were responsible for assembling Literacy Planning Teams consisting of teachers, administrators, school personnel, and parents representing students age birth to grade 12. The Literacy Planning Teams used data and their perception to identify the areas of needed improvement within each of the statutory funding areas across the seven components of a comprehensive literacy framework. The KtO LLNA included the following components for the literacy teams to evaluate: Standards and Curriculum; Assessments; Instruction; Professional Learning and Practice; Literacy Leadership, Goals, and Sustainability; Transition; and Partnerships. Moreover, it outlined 101 specific strategies and actions recommended to support the implementation of a literacy framework across the seven components, which districts rated on a four-point scale based on their assessed needs. The KtO LLNA is located on the Pennsylvania Department of Education (2011a) website for all districts to access and use as a literacy planning tool.

The capacity for a secondary school to implement a school-wide comprehensive literacy plan includes both instructional and infrastructural components that interdependently support teachers and students, which the KtO LLNA addresses. An effective secondary program includes explicit literacy instruction, professional development frameworks, and administrators collectively supporting students while they development literacy skills to construct and communicate knowledge across the content areas (Biancarosa & Snow, 2006; Kamil et al., 2008). The KtO LLNA includes criteria for districts to evaluate the degree to which the elements of a comprehensive literacy program are in place in their respective schools. Additionally, an effective program includes teachers that use a curriculum that requires systemic literacy instruction in all content areas that requires complex, disciplinary text that necessitates students use a myriad of comprehension and cognitive skills, as well as their knowledge of vocabulary to further their understanding of content information to construct and communicate content information (Beck, McKeown, & Kucan, 2002; Fang & Schleppegrell, 2010; O'Brien et al., 1995; Shanahan, 2009). Effective teachers use a variety of formative and summative assessments to monitor student-learning outcomes to make appropriate adjustments to instruction where applicable (Biancarosa & Snow, 2006). The KtO LLNA specifically requires districts to evaluate their use of curriculum, instruction, and assessment to support a comprehensive literacy program. It also addresses teachers' participation in on-going, job-embedded professional development to build capacity and a school culture that supports teachers as they reconceptualize their role in teaching students how to read and write specific to their content area (Bean & Dagen, 2011; Jetton & Alexander, 2004; Moje et al., 2004). The KtO LLNA also requires districts to assess their capacity to maintain literacy at the forefront of decisions concerning personnel, budgets, professional development, curriculum, and supervision and evaluation (Bean,

2004; Bean & Dagen, 2011). Therefore, the KtO LLNA garnered statewide data on the current capacity for high schools to implement a comprehensive literacy plan.

The second and third research questions addressed secondary principals' professional development needs and plans to prepare to implement the new PA Core Standards for literacy instruction in the content areas. Using a purposive sample, five secondary principals in Southwestern Pennsylvania were interviewed to amass information on principals' current professional development needs to lead a school-wide literacy program and their plans to prepare for the challenges they may face (Bean & Dagen, 2012; Stein & Nelson, 2003). Effective secondary principals are not masters of all content areas, but they are responsible for having an in-depth knowledge of strong instructional practices and setting the vision for the school, leading individual personnel, maintaining a working knowledge of literacy instruction, and arranging professional development for the educators they lead, as well as for themselves (Stein & Nelson, 2003). Additionally, they are responsible for aligning new literacy standards with current content area curriculum to monitor student achievement to make appropriate adjustments to curriculum and instruction when necessary (Bean & Dagen, 2011). The guided conversation allowed the investigator to produce a narrative conveying the secondary principals' perceptions of their role as the literacy leader in their school and their potential needs to implement literacy in the content areas.

Moreover, a fundamental component of a building principal's role is to manage the process of change within the school culture (Fullan, 2002). Currently, many content teachers are unaware of how to embed disciplinary literacy instruction into their practice (Moje et al., 2004); therefore, the push for literacy standards across the current curriculum potentially creates a major change for most teachers. Developing teacher quality and building capacity for literacy

instruction across the content areas is addressed through on-going, job-embedded professional development that principals are responsible for supporting (Anders et al., 2000; Dillon et al., 2011; Hammerness et al, 2005; Bean & Dagen, 2011). Therefore, the investigator asked the principals questions that require a self-assessment of their preparedness to implement literacy standards across the content area and their plans for professional development for teachers and themselves (Bean & Dagen, 2012; IRA, 2010; PDE, 2012). As Stein and Nelson (2003) posit, knowledge of the components of literacy instruction is necessary for instructional leaders to lead a school-wide literacy reform; thus, the guided conversation between the principal and investigator addressed the principal's strengths and needs as literacy leaders.

After identifying their needs, the capacity for principals to act as instructional leaders depends on their plans to prepare for the standards based literacy reform movement. The principals interviewed reflected on their current work to prepare to implement the new standards and their outstanding professional development needs not yet addressed. The questions used during the guided conversation addressed components of professional development that include collaboration with other professionals; participation in trainings; access to resources; and involvement with universities and other organizations that support educational reform (Bean & Dagen, 2012; Darling-Hammond, et al., 2010; Stein & Nelson, 2003).

3.4 METHODOLOGY AND PROCEDURES

Secondary Data Analysis

The first research question addressed high schools' capacity to implement components of a school-wide comprehensive literacy plan, which the KtO LLNA addresses. Data were collected through a secondary data analysis of the KtO LLNA results. The rationale for using pre-existing data is twofold: it saves time by using data that were already collected for a similar purpose and the data represent a larger cohort than one the researcher could manage (Kiecolt & Nathan, 1985; Trzesniewski, Donnellan, & Lucas, 2011). The KtO LLNA collected data on districts' capacity to implement a comprehensive literacy framework, and it includes over 300 districts from across the state.

The secondary data analysis relies on the primary data collected by the Pennsylvania Department of Education (2013) to award grant money for the Striving Readers Comprehensive program. The University of Pittsburgh's Collaborative for Evaluation and Assessment Capacity was commissioned to organize the data; however, the raw data were collected by PDE and organized on the Local Literacy Needs Assessment document (Kiecolt & Nathan, 1985, p. 10). The LLNA was located on the Pennsylvania Department of Education Standards Aligned System website (PDE SAS) (<http://www.pdesas.org/module/content/search/keystones.aspx>). District literacy teams used a four point ordinal scale to evaluate their high school's capacity to implement the 101 strategies and actions, based on their perspective of the descriptor being an "Area of Strength (3)," "In Place (2)," "Emerging (1)," and "Not in Place (0)" for students birth-age 5, elementary, middle, and high school. Of the 500 LEAs in Pennsylvania, 319 LEAs and 10 charter schools submitted the needs assessment; however, only 324 school districts completed the LLNA with usable data. Four schools submitted blank documents and one school submitted

a document with multiple numbers for each of the scoring areas. The individual school LLNAs were uploaded by a member of CEAC into a Box account, which is a cloud-based drive that is only accessible by the owner of the account. An Excel spreadsheet was created with the list of measurable variables, and then each LLNA was read and the data points were manually entered onto the spreadsheet. School names were not used on the Excel spreadsheet.

The analysis for this study will focus on the single statutory results of the high schools in five of the seven components assessed: Standards and Curriculum, Assessments, Instruction, Professional Learning and Practice, and Literacy Leadership, Goals, and Sustainability. The research question addresses the current capacity of secondary schools to implement components of a school-wide comprehensive literacy plan, which does not include the transition to new standards or partnerships with other organizations; therefore, the last two components of the KtO LLNA, Transitions and Partnerships, are not being used for this study. Moreover, the investigator selected 31 specific variables (Appendix A) assessed through the LLNA that align with the literature reviewed and the goals of the study, which are outlined in Table 1 below. Many of the variables assessed throughout the KtO LLNA are specific to the grant requirements and do not directly coincide with the purposes of this study.

Table 1. Alignment of Variable from the KtO Local Literacy Needs Assessment and Research

Components of a Comprehensive Literacy Program	Strategies and Actions Assessed	Connection to Literature Reviewed
Standards and Curriculum	A. 1, 4	Biancarosa & Snow, 2006 Kamil et al., 2008
Assessments	A. 1 B. 2 C. 3 E. 1 F. 1, 2	Biancarosa & Snow, 2006 Kamil et al., 2008
Instruction	A. 1 B. 1, 3 C. 1 G. 1	Bean, 2004 Beck, McKeown, & Kucan, 2002 Fang & Schleppegrell, 2010 O'Brien et al., 1995 Shanahan, 2009
Professional Learning and Practice	A. 1, 2 B. 1, 2 C. 1, 2, 4, 6	Bean & Dagen, 2011 Darling-Hammond et al., 2010 Jetton & Alexander, 2004 Moje et al., 2004
Literacy Leadership, Goals, and Sustainability	A. 2, 5 B. 1, 3, 5, 8 C. 3, 4 D. 3, 4	Bean & Dagen, 2011 Stein & Nelson, 2003

The data collected from the 324 school districts was organized in an Excel spreadsheet that was analyzed using STATA, a statistical analysis software program. The ordinal data were analyzed for frequency distribution of the schools' capacity for implementing components of a comprehensive literacy framework based on the strategies and actions listed in Table 1. Other descriptive statistics, such as mean and standard deviation, were also generated from the data.

Interviews

The second and third research questions were addressed through a guided conversation with five secondary principals from Southwestern Pennsylvania. The investigator generated a list of high schools in Southwestern Pennsylvania based on information from intermediate unit websites, which includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland Counties. The investigator limited the selection of principals to include only those who work in Southwestern Pennsylvania to increase the feasibility of conducting face-to-face interviews in a timely manner. Using the free website Random.org, the investigator generated a randomized list of the school districts, and then select every 25th school to use in the study (Mertens, 2010). If a principal did not agree to participate in the study, the next high school principal on the list was contacted.

The investigator contacted the principals via e-mail to describe the study, rationale of the study, potential risks, and the purpose for including them (Appendix B). Then, the investigator will followed up with a phone call asking for the principal's verbal consent to participate in a 45-minute interview and to schedule a time to meet. At the scheduled interview, the investigator asked for the principal's verbal consent to participate in the study and to allow the researcher to audio record the interview. The principal's verbal consent was recorded via an iPad note-taking application

Once the principal agreed to being audio recorded, the principals was asked five open-ended questions that focused on their school's capacity to implement literacy instruction in the content areas; their needs as instructional leaders to implement literacy standards in the content areas; and their plans to ready themselves for the responsibility. The questions, which are listed in Appendix E, related "directly to what the interview is about empirically, so the researcher maximizes the acquisition of non-forced data" (Glaser, 1992, p. 25) and focus on the three main

areas of the study. The interview was structured as a guided conversation so that it covered limited topics in depth and created a level of comfort that allowed the principals to share information with “depth, detail, and accuracy” as it applies to their varied experiences (Rubin & Rubin, 1995, p. 144). Additionally, although there were only five main interview questions, each question has subsequent probes to elicit more detailed information from the participants (Rubin & Rubin, 1995).

The answers to the interview questions were analyzed to produce findings that are not arrived at using statistical analysis (Glaser, 1992; Patton, 1980). The principals’ responses were transcribed and then analyzed through open-coding, axial-coding, and selective-coding, and then emergent themes were identified and articulated through narratives and subsequent connections between the principals’ responses (Charmaz, 2005; Creswell, 2007; Mertens, 2010). The results of the interviews are communicated in the written report through narratives.

3.5 SAMPLE

There were two populations used for this study. The first population used for this study was generated by the Pennsylvania Department of Education through the KtO Local Literacy Needs Assessment application. All Local Educational Agencies (LEAs) in Pennsylvania were extended the opportunity to complete the KtO LLNA; however, Intermediate Units (IUs) and career and technology centers (CTCs) were not considered LEAs for the purpose of the KtO study. Additionally, the LEAs were informed that their application would be scored based on “demographic need, academic need, and the capacity of the applicant to address these needs based on the quality of the comprehensive Local Needs Assessment” (PDE, 2011). Although all

districts were eligible to compete for the grant, only 324 schools submitted the KtO Local Literacy Needs Assessment.

The investigator used purposive sampling to generate a subset of principals from Southwestern Pennsylvania to address the second and third research questions. It was not feasible for the investigator to conduct a face-to-face interview with principals across the state; therefore, the investigator created a list of the 126 secondary schools in Southwestern Pennsylvania based on information from IU websites that serve Allegheny, Beaver, Butler, Greene, Fayette, Indiana, Lawrence, Washington, and Westmoreland counties. Then, using the free website random.org, a randomized listing of the schools was generated, and a systematic random sampling of the 126 schools was taken from the list by selecting every 25th school listed until an initial group of 5 principals was created (Cresswell, 2007; Mertens, 2010). The building principal of each school was contacted via e-mail to ask for their participation in the study. If a principal did not agree to participate in the study, the next principal on the list was contacted until a willing participant emerged. The e-mail used to recruit potential participants is listed in Appendix E.

3.6 DATA COLLECTION

Secondary Data Analysis

The data collection for the KtO LLNA took place from December 2011-January 2012 within individual districts across the state. All districts in the state were eligible to complete the needs assessment and apply for the grant money from the Striving Readers initiative; however, only 319 LEAs and 10 charter schools completed the pre-application. Prior to completing the KtO

LLNA, districts formed literacy teams consisting of district administrators, school principals, curriculum experts, early childhood program directors, teachers, and parents representing students from birth through grade 12, and then collected school data to evaluate their current needs and capacity for literacy instruction through an ordinal rating scale provided in the Local Literacy Needs Assessment. The members of the district literacy team completed the KtO LLNA individually, and then convened to establish consensus about the districts' strengths and areas of need based on seven components of a comprehensive literacy plan and 101 corollary strategies and actions recommended to support the implementation of the plan. The districts' evaluations were submitted to the Pennsylvania Department of Education (PDE). The data from the districts' self-evaluations were placed into a Box folder by the University of Pittsburgh's Collaboration for Evaluation and Assessment Capacity, and then the researcher organized the data on an Excel spreadsheet. The researcher only used 31 of the 101 variables districts evaluated through the KtO LLNA, which are listed in Appendix C. The 31 variables were selected based on their alignment with the contextual framework of this study. The secondary data were collected and organized in December of 2013.

Interviews

The interviews were conducted from July-August 2013. Secondary principals are particularly busy at the end and beginning of a school year; therefore, the interviews were facilitated during the summer months when principals have more time to discuss their role as a literacy leader. The investigator scheduled a time to meet face-to-face with the principal for a 45-minute interview at a location of the principals' choosing. The interview was conducted using a list of guiding questions (Appendix C) that represent the main topics of analysis; however, probing

questions and follow up questions were also used to elicit more detailed responses from the principal (Rubin & Rubin, 1995). As shown in Table 2, the interview questions are aligned to the supporting research and the specific information to be generated. Prior to interviewing the principals, the investigator asked for their verbal consent to audio record the interview. During the interview, the investigator took some notes, but the principals' recorded responses were transcribed after the interview for further analysis.

Table 2. Alignment of the Interview Questions to the Study and Research

Question	Alignment to Study	Supporting Research	Data Generated
1	<ul style="list-style-type: none"> Professional Development Needs: Content Knowledge 	Bean & Dagen, 2011 Stein & Nelson, 2003	Experience with Secondary Literacy Instruction
2	<ul style="list-style-type: none"> Professional Development Needs: Building a Literacy Plan 	Fullan, 2002 Moje et al., 2004 Biancarosa & Snow, 2006	Instructional Leadership Role with Literacy Planning
3	<ul style="list-style-type: none"> Current Secondary School Capacity for a Comprehensive Literacy Plan: Components of Effective Programs Professional Development Needs: Building Capacity 	Biancarosa & Snow, 2006 Bean, 2004 Bean & Dagen, 2011 Kamil et al., 2008 Moje et al., 2004 Stein & Nelson, 2003	Necessary Instructional and Infrastructural Changes to Support Secondary Literacy Instruction Across the Content Areas
4	<ul style="list-style-type: none"> Professional Development Needs: Building Capacity 	Bean & Dagen, 2012 Biancarosa & Snow, 2006 Darling-Hammond et al., 2010 IRA, 2010 Stein & Nelson, 2003 Walpole & McKenna, 2011	Needs to Support Secondary Literacy Instruction Across the Content Areas
5	<ul style="list-style-type: none"> Instructional Leader's Preparedness: Professional Growth Plan 	Bean & Dagen, 2012 Darling-Hammond et al., 2010 IRA, 2010 Stein & Nelson, 2003 Walpole & McKenna, 2011	Professional Development Work and Plans to Lead Secondary Literacy Instruction in the Content Areas

3.7 DATA ANALYSIS AND REPORTING

The data collected from the KtO LLNA and organized on an Excel spreadsheet were uploaded into STATA, a statistical analysis software program. STATA was used to generate the reported mean and standard deviation of the data for each of the component broad strategies listed on the LLNA, and frequency distribution tables were generated to describe how districts rated their implementation level of each of the specific actions recommended through the KtO LLNA, which are aligned to the broad strategies (Mertens, 2010). The scale of measurement is ordinal and organized according to the increasing or decreasing degree at which a strategy or action to implement a comprehensive literacy plan is in place (Mertens, 2010). The measure of central tendency and standard deviation are reported in narrative form; whereas, the frequency distributions are reported in tables and further discussed in the narratives. The statistical information describes the current capacity of Pennsylvania high schools to address specific strategies and actions recommended to support the implementation of a comprehensive literacy plan.

The data from the interviews with secondary principals generated in-depth, qualitative information that more thoroughly describe the current professional development needs and strengths of secondary principals as they begin to lead literacy reform in their school. After the completion of all interviews, the researcher transcribed the audio recordings in order to begin the formal coding process. The investigator identified ideas or concepts that are mentioned in the transcriptions by annotating the initial information shared by the principals (Creswell, 2007; Rubin & Rubin, 1995). Then, initial codes were created and examined for “salient categories of information” to group together responses describing similar ideas, processes, and or concepts (Creswell, 2007, p. 160). By compiling categories of similar information, such as the needs,

methods of preparation, beliefs, and thoughts of the principals during the interviews, the researcher can better organize the information after all of the interviews are completed (Creswell, 2007; Mertens, 2010). Finally, the researcher used selective coding to build “a ‘story’ that connects the categories” (Creswell, 2007, p. 160). The researcher used the coded data to interpret the findings and then represent the principals’ perspectives and experiences through narratives and tables to “compare what different people said, what themes were discussed, and how concepts were understood” (Rubin & Rubin, 1995, p. 228). Through the examination and connection of the themes, a better description of the “cultural arena or explanations of the topic” addressed through the study is presented (Rubin & Rubin, 1995, p. 228). The narratives provide rich, in-depth descriptions of the principals’ responses to the interview questions, which address the initial research questions studied.

3.8 PERSONAL SIGNIFICANCE AND POTENTIAL BIAS

I started my teaching career two years after the No Child Left Behind Act began to reform education through the implementation of state standards and accountability measures. As a naïve, high school English student teacher, I thought students would be prepared to participate in lofty discussions on assigned literature; however, I quickly discovered that most of my students could read, but they were not able to read with depth or purpose. As an English major, I was not instructed on how to teach adolescents the art of reading; therefore, I entered a Master’s Degree program in reading education at the University of Pittsburgh a few weeks before I graduated from Washington & Jefferson College. While working in the reading clinic and developing professional development opportunities in a course titled Leadership in the School Literacy

Program, I gained a better understanding of how literacy instruction stretched well beyond the reading specialist or language arts teacher. I realized that adolescents need explicit reading instruction to guide them through the complex texts assigned across the curriculum. Nonetheless, I also knew from field placements, student teaching, and my experience as a full-time teacher, that few content teachers across the secondary curriculum embed literacy instruction into their lesson.

After finishing my reading specialist program, I entered a principal preparation program at the University of Pittsburgh, which prepared me to serve as an instructional leader. After nine years of teaching high school English, I transitioned into an administrative position at the high school level. The new position enlightened me to the potential I had to build a stronger high school literacy program through the resources we already had in place, professional development, and my content knowledge. With the advent of the Common Core State Standards and my passion for adolescent literacy, my research and professional goals began to focus on unlocking the potential of all students through the development of their reading skills. As an assistant principal, I am able to help content area teachers address literacy instruction with their students. Specifically, I have helped social studies teachers use primary documents to teach students to read and think like historians and to corroborate historical accounts. Additionally, I have helped science teachers identify authentic articles from scientific journals to use with students to annotate text and identify relevant connections between content and current scientific breakthroughs. Moreover, I have encouraged English teachers to integrate more non-fiction text into their curriculum to help create context for the literature they already teach. My commitment to adolescents and literacy instruction in secondary schools guided me to this research study.

3.9 LIMITATIONS

Although I have taken all precautions to protect the validity of the study, there are several limitations of this study that could potentially impact its results. First, using secondary data for analysis is a limitation because the data were collected prior to the initiation of the study design; therefore, as Donnellan, Trzesniewski, and Lucas (2011) highlight, “all of the information about data collection procedures or important details about problems that occurred during data collection” might be unknown (p. 5). Furthermore, only 324 of the 500 schools in Pennsylvania completed the needs assessment, which means roughly 64.8% of the school districts in Pennsylvania are represented in the results.

Additionally, the Literacy Planning Teams’ perception of their schools’ preparedness to implement a comprehensive literacy program is predicated on their own understanding of literacy and current practice. Therefore, a school might rate themselves higher or lower in a category because their expectations of students and teachers is too low or too high. Mertens (2010) argues that one of the biggest limitations of social research is its reliance on “individuals’ self-reports of their knowledge, attitudes or behaviors. Thus the validity of the information is contingent on the honesty of the respondent” (p. 173). The perspective of the districts and the principals is just that, a perspective.

A limitation of the qualitative data garnered from the principal interviews is the inability to generalize the results beyond Southwestern Pennsylvania. The principals selected for the interviews are from Southwestern Pennsylvania; therefore, their resources, training, and perspectives might differ from secondary principals from other regions of the state. The regional bias might also be complicated by the fact that most secondary principals in this region were born, raised, and educated in Southwestern Pennsylvania, so their exposure to other educational

practices is limited (Bichsel, 2008). Guba and Lincoln (1989) theorize that no one sampling strategy can guarantee that the conclusion of a study can be generalizable to a population because of the distinctiveness of the context and time in which the study was administered. Furthermore, some principals might not be comfortable answering questions because of their lack of knowledge on the subject; therefore, they may not provide in-depth descriptions of their situation (Mertens, 2010).

Although there are limitations to the study, the potential information gleaned from the research is valuable to schools, researchers, and educational agencies as they begin to implement literacy standards in the content areas at the secondary level. The study is significant because it assesses the level of high schools and principals' preparedness to implement a national reform movement. Additionally, the data assembled from this study could help researchers and professional development coordinators as they continue to create more effective programs to support the efforts of principals to increase adolescent reading achievement. The data could potentially impact academic programs in schools of education at the university level to include additional instruction on the role of literacy at the secondary level.

3.10 CONCLUSION

A study that includes results from secondary schools across Pennsylvania more accurately reflects the current state of literacy education in high schools, and it also aids in presenting descriptive statistics based on the variables necessary for a cohesive literacy program. Additionally, interviews with principals provides an opportunity to collect qualitative data to analyze potential gaps in understanding and obstacles principals face as they prepare to implement a literacy plan across the content areas (Mertens, 2010). Analysis of the data and integration of the findings will tell a more complete story of the resources, needs, and plans of secondary principals in Southwestern Pennsylvania to move forward with the newest educational reform movement to sweep the state.

4.0 DATA ANALYSIS AND FINDINGS

The purpose of this study was to address the capacity of secondary schools and administrators to implement new literacy standards across the secondary curriculum. Additionally, the study identified the perceived professional development needs and preparatory work of secondary principals to implement the PA Core standards for literacy instruction in the content areas. Secondary data collected by the Pennsylvania Department of Education (PDE) through a Local Literacy Needs Assessment (LLNA) in an effort to award grant money to support district literacy programs through the Keystones to Opportunity (KTO) initiative was used to identify the current state of literacy instruction at the high school level. Additionally, the study included interviews of five high school principals who were selected based on the criteria of being a secondary building principal in Southwestern Pennsylvania tasked with the responsibility of implementing the new PA Core standards for literacy in the content areas.

This chapter includes the research findings from the KTO study and the interviews with the building principals. The first part of this chapter contains a basic demographic overview of the schools that completed the KTO LLNA and the building principals who participated in the study. The second part of this chapter presents the findings for each of the three research questions. Data from the KTO LLNA is presented through narrative and frequency tables to address the first research question. The second and third research questions are addressed

through a report of major and minor themes that emerged from the interviews conducted with the building principals.

4.1 DEMOGRAPHIC INFORMATION

KTO Schools

The KTO LLNA was submitted by 329 school districts; however, four of the school districts submitted a blank needs assessment and one district incorrectly completed the assessment by using more than one number to evaluate the district's implementation of the specific strategy or action as outlined in the LLNA. Therefore, data from 324 school districts were used in this secondary data analysis. The schools included public schools, cyber charter schools, and charter schools across Pennsylvania. Each district that completed the LLNA was required to establish a Literacy Planning Team with representation from "each of the statutory areas (Birth-Age 5, Elementary, Middle, and High School)" (PDE, 2011a). The Literacy Planning Teams included administrators, teachers, parents, community members, and outside organizations; however, the Literacy Planning Teams were not consistently comprised of the same number of members or district positions. The study only used the results catalogued for the high school statutory group.

Principals Interviewed

The names of the 126 secondary building principals in Southwestern Pennsylvania were placed in an Excel spreadsheet, and then a random listing of the names using the website Random.org was generated. To select five building principals as potential participants in the study, every 25th principal listed was contacted for an interview. The 25th principal on the list

was contacted; however he were unable to arrange a time to meet, and the 26th and 27th principals listed did not return the phone call requesting an interview. The 28th principal on the list did agree to an interview. Additionally, the 50th, 75th, and 100th principals on the list agreed to an interview. The 125th principal responded via e-mail that he was not interested in an interview, and the 126th principal did not return my phone call, which cycled the process back to the first principal listed, and he agreed to an interview. All of the principals interviewed are male, and two of the five principals have worked with me in a professional capacity. Table 3 provides contextual information about the principals interviewed for this study. The enrollment category identifies the number of students the principal supervises. The reading proficiency rate identifies the percentage of the school’s juniors who were proficient on the standards based assessment from the 2011-2012 school year as measured by the Pennsylvania System of School Assessment (PSSA). To make annual yearly progress, every measurable subgroup in the school must have at least 81% of the tested students achieve a Proficient score or higher on the reading assessment. The setting category identifies the location of the school and the grade levels served. Finally, the principals’ teaching experiences are also listed.

Table 3. Contextual Information about the Principals Interviewed

Principal	Enrollment	Reading Proficiency Rate on PSSA (2012)	Setting	Secondary Teaching Experience
A	206	34%	Urban, Grades 9-12	English
B	1130	61.9%	Urban, Grades 9-12	Social Studies
C	1712	92.8%	Suburban, Grades 9-12	Math
D	1123	83.7%	Suburban and Rural, Grades 11-12	Biology
E	976	78.4%	Suburban and Rural, Grades 9-12	Special Education Social Studies

Principal A

At the time of the interview, Principal A had just completed his first year as the high school principal in an urban district; however, he has over fifteen years of administrative experience, some of which was in an urban setting. According to his school website, his high school educates 206 students grades 9-12. Of those students, 53% are identified as economically disadvantaged and 25% qualify for special education services. Prior to working in administration, Principal A began his career as an English teacher at a high school in the central part of Pennsylvania. He discussed his experience with literacy as limited to assigning reading, discussing literature, and evaluating writing. Candidly he stated that he would not be comfortable providing his teachers with resources to improve literacy instruction in the content areas. Throughout the interview he mentioned that the current curriculum his high school uses does not embed literacy instruction within the content areas, but the district curriculum director manages the curriculum, so he has limited authority to make changes. Furthermore, he voiced his concern with the limited professional development he has received on improving literacy at the secondary level since other administrators and teachers in the district grades PreK-8 are receiving professional development on literacy through KTO grant money. At the end of the interview he referenced his frustration with his current situation when he said, "I wish I could give you the context of our situation. There are good things going on. It's just, it's broke, so where do you start to fix it?"

Principal B

Principal B's experience in education is very different than the other interviewed principals' experiences. He was a dean of discipline for a high school and taught history at the

Community College of Allegheny County prior to becoming a building principal. He moved from dean of discipline in a neighboring district directly to the building principal of the urban high school in which he currently works. His school houses about 1130 students in grades 9-12. Of his students, 65% are identified as economically disadvantaged and 13% qualify for special education services. He is credited with improving the culture of his high school through management systems, such as enforcing a strict dress code, which is documented in local administrative journals. Now that he has influenced the culture in his building, he stated that his “next big step” for the high school is to improve literacy instruction. He referenced his initiative as the “literacy project.” Although he admitted that his experience with literacy is limited, he was passionate about his commitment to doing more with literacy:

I think this is an awesome topic. I think it is something that is so relevant right now. I think hopefully more people are thinking along the same lines. It is influencing everything. In math kids aren't successful because they can't read the stinking problem! Biology, social studies, art, everywhere, reading, literacy, writing skills, the speaking part of literacy, especially kids here in my school, it is something they need more.

Most of the necessary changes his school needs to make to implement the new state standards for literacy instruction across the curriculum will be addressed through his teachers. He expressed a strong faith in his teachers' abilities to lead the literacy initiative through in-house professional development and best practice sharing.

Principal C

Principal C has been the building principal of one of the highest achieving high schools in Pennsylvania for the past three years. He began his career as a middle school math teacher

and then became a dean of students in the same district before becoming the building principal. Currently, his building serves approximately 1712 students grades 9-12 in a suburban setting with about 9.6% of the students identified as economically disadvantaged and 12% qualifying for special education services. With over 90% of his students scoring proficient on the PSSA reading test for grade 11 students, his district has not devoted professional development time specifically to literacy instruction in the content areas; however, his English department chair has made a point to help other content area teachers embed literacy instruction into their curriculum based on the new Core standards. Principal C articulated his comfort with supervising and evaluating teachers and supporting academic programs, and he also recognizes the strength he has within his English department. He credited the community and parents of his students, most of which are educated professionals, with preparing the students with necessary literacy skills prior to entering high school.

Principal D

Principal D has worked as the senior high school building principal in his district for eight years. Before his role as an administrator, he taught both middle school science and high school biology. The majority of his students come from a suburban area; however, his district also includes a vast rural area. The senior high school is home to 1123 students. Of his students, 13% are identified as economically disadvantaged and 14% qualify for special education services. About 84% of his grade 11 students were proficient on the PSSA reading test in 2012. He conceded that in his role as the building principal, he has not had much of a part in the implementation of literacy instruction across the content areas. Furthermore, his district crafted “a School Improvement plan through [their] new strategic plan,” and he was not on the

committee for literacy. Additionally, in his district the assistant superintendent of secondary schools is responsible for the curriculum and development of programs for literacy achievement in the high school. He stated that the curriculum has been aligned to the new PA Core standards, but the teachers have full flexibility to teach what they think is important with little administrative oversight. Moreover, he stated that “the Common Core is behind us now,” and that his professional development needs focused more on legal issues and public relations rather than leading literacy instruction across the curriculum.

Principal E

Principal E has over 11 years of experience as the building administrator of a blended suburban and rural high school. Prior to being an administrator, he taught social studies and was a special education emotional support teacher. His building serves about 976 students; 17% of the students are identified as economically disadvantaged and 11% qualify for special education services. Although only 78% of grade 11 students scored proficient on the PSSA reading test, Principal E feels his students do well on standards based tests, except for students in the special education program or those identified as English Language Learners (ELL). Most recently, the professional development and learning of Principal E has focused on the new teacher evaluation system and basic elements of the transition to the Common Core. Moreover, when discussing literacy instruction and possible avenues of evaluating teachers’ use of literacy instruction in the content areas, Principal E continually used language from the Danielson Framework for Teacher Evaluation and key words and phrases from the Common Core Standards, such as “primary document analysis.” Additionally, he repeatedly talked about the importance of getting teacher

buy-in before creating a cultural change with the implementation of literacy instruction across the curriculum.

4.2 PERCEIVED CURRENT CAPACITY FOR SECONDARY SCHOOLS TO IMPLEMENT LITERACY INSTRUCTION

The perceived current capacity for secondary schools to implement a comprehensive literacy program was generated from the KTO LLNAs that districts completed. Five of the seven components were used for this analysis: Standards and Curriculum; Assessments; Instruction; Professional Learning and Practice; and Literacy Leadership, Goals, and Sustainability. Each of the five components was disseminated into further strategies recommended to support the implementation of a literacy framework, and the strategies were designated with a letter. The strategies were further broken into actions recommended to support a literacy framework, which were listed numerically. For each of the actions listed, districts rated their implementation based on a four-point ordinal scale: Area of Strength (3); In Place (2); Emerging (1); or Not in Place (0). The Literacy Planning Team for each of the districts agreed upon the rating.

4.2.1 Standards and Curriculum

Districts evaluated their use of standards and curriculum at the high school level to support the implementation of a comprehensive literacy framework. The LLNA included one overall strategy with eight sub-strategies to evaluate the use of standards and curriculum to support

literacy. Table 4 displays the criteria districts analyzed to measure their capacity for implementing a comprehensive literacy framework.

Table 4. Description of Standards and Curriculum Criteria of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Standards and Curriculum	A. The district’s written curriculum for Literacy – Birth-Grade 12 - is aligned with the Pennsylvania Early Learning Standards (birth-5), the Pennsylvania Academic Standards for Reading, Writing, Speaking and Listening (K-12) and with the Reading Assessment Anchors and Eligible Content (Grades 3-8 and 11). Essential goals and content are articulated by grade level and provide the basis to enable all students to gain the necessary skills of a “literate person in the twenty-first century” (CCSS, p. 3).	1. The Pennsylvania State Academic Standards, the Pennsylvania Early Learning Standards, and the Pennsylvania Comprehensive Literacy Plan (PaCLP) are the foundation of the district’s written curriculum. This curriculum explicitly states what students need to know and be able to do at each grade level. 4. Reading, writing, speaking and listening are systematically integrated throughout the day in all subject areas.

On average, school districts reported that most secondary schools (M=1.7, SD=.8 on a scale of 0 to 3) have curriculum in place that is aligned to the Pennsylvania State Academic Standards and the PaCLP. Additionally, the curriculum clearly states what students should be able to do grades 9-12. Table 5 illustrates that the majority of schools have an established curriculum in place (58.3%, n=189). Most districts systematically integrate components of literacy instruction across the subject areas throughout the day (M=1.6, SD=0.9 on a scale of 0 to 3). However, schools most frequently identified that the integration process is emerging (44.1%, n=143). Table 5 displays the frequency distribution of the districts’ perceptions of their capacity to implement specific strategies to support a literacy framework under the component of Standards and Curriculum.

Table 5. Frequency Distribution of High Schools’ Use of Standards and Curriculum from the LLNA

Strategy and Action from the LLNA	A.1		A.4	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	46	14.2%	51	15.7%
In Place	143	44.1%	104	32.1%
Emerging	117	36.1%	143	44.1%
Not in Place	18	5.6%	26	8.0%
	n=324	100%	n=324	100%

The new PA Core standards require the immersion of literacy skills across the secondary curriculum; therefore, this component of the literacy framework will need improved in many high schools across Pennsylvania.

4.2.2 Assessments

The use of assessment to support a literacy framework was one of the components districts’ identified as most underdeveloped for their high school programs. The element of assessment encompasses the district’s capacity to empower schools to use data from literacy assessments, both formative and summative, to adequately adjust instruction based on student needs. Table 6 describes the specific criteria districts used to evaluate their program.

Table 6. Description of Assessment Components for Criteria A and B of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Assessment	(A) District personnel provide leadership for literacy assessment.	1. A “data culture” exists throughout the district. This includes a system to support building administrators in the use of literacy assessment data in schools and to develop follow-up plans to adjust instruction as needed at the school, grade and student levels
	(B) The district selects literacy assessment measures that are valid and reliable and that provide information on the essential elements of literacy instruction (phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing).	2. Selected measures provide information on the essential elements of literacy instruction appropriate for each level or grade span and are explicitly linked to district and state literacy goals. Duplication of assessment measures is avoided.

The majority of districts recognized that district personnel are not providing support for literacy assessment ($M=1.5$, $SD=.08$ on a scale of 0 to 3). In fact, a substantial number of districts (54.3%, $n=176$) stated that the existence of a “data culture” is either not in place or emerging in their secondary schools. Furthermore, it was more common for districts ($M=1.2$, $SD=0.9$ on a scale of 0 to 3) to state that their high school programs are not fully implementing assessment measures that “provide information on the essential elements of literacy instruction.” Table 7 illustrates the frequency distribution of districts’ evaluation of their use of assessment.

Table 7. Frequency Distribution of High Schools’ Use of Assessment for Criteria A and B of the LLNA

Strategy and Action from the LLNA	A.1		B.2	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	40	12.4%	21	6.5%
In Place	108	33.3%	104	32.1%
Emerging	144	44.4%	131	40.4%
Not in Place	32	9.9%	68	21.0%
	$n=324$	100%	$n=324$	100%

Overall, the data illustrates that most high schools are not planning or implementing effective assessment practices that are essential for monitoring ongoing improvement of student reading skills.

The majority of school districts in Pennsylvania recognize that they do not have the capacity to gather and use data to support educators who are responsible for literacy instruction at the high school level. Table 8 describes two of the criteria districts used to evaluate their current capacity for using assessment data to make discussions.

Table 8. Description of Assessment Component for Criteria C and E of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Assessment	(C) The district has developed capacity to gather and use data.	3. Ongoing training and support is provided to all staff who teach or supervise literacy programs in the following areas: a) Assessments used by the district b) Data analysis c) Data interpretation d) Data utilization
	(E) Formative and summative evaluations are incorporated at all grade spans.	1. Support for a district-wide formative assessment process is provided at each level. Necessary resources are dedicated to ensure each school has a viable plan for collecting ongoing progress monitoring data on students receiving interventions. District recommendations are established regarding the frequency of data collection for students at risk of reading difficulties.

On average, school districts are beginning to develop a capacity to gather and use data to improve literacy instruction (M=1.1, SD=0.8 on a scale of 0 to 3). Most of the districts (71.6%, n= 232) that completed the LLNA identified that they either do not have training or are beginning to train their educators on the “assessments used by the district, data analysis, data interpretation, and data utilization” as it pertains to literacy instruction. Additionally, on average school districts are beginning to incorporate formative and summative evaluations grades 9-12 for literacy integration (M=1.1, SD=0.8 on a scale of 0 to 3). School districts (74.4%, n=241) most frequently identified that a “district-wide formative assessment process...dedicated to

ensure each school has a viable plan for collecting ongoing progress monitoring data” for literacy is either emerging or not in place. The frequency distributions of the districts’ self-evaluations for Criteria C and E are listed in Table 9.

Table 9. Frequency Distribution of Assessment for Criteria C and E of the LLNA

Strategy and Action from the LLNA	C.3		E.1	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	14	4.3%	23	7.1%
In Place	78	24.1%	60	18.5%
Emerging	160	49.4%	159	49.1%
Not in Place	72	22.2%	82	25.3%
	n=324	100%	n=324	100%

The use of data and ongoing monitoring of student literacy growth is essential to ensure students are making sufficient progress. However, the data collected from the school districts illustrates that the majority of districts are not adequately supporting educators to be versed in the use of data, nor do they have a viable plan to use formative assessments to immediately adjust literacy instruction for high school students.

The majority of districts are also not supporting an ongoing review and adjustment process for high schools to be responsive to the needs of the students. Table 10 provides a description of the criteria districts used to evaluate their use of assessment as it applies to the data analysis of administrators and teachers to adjust literacy instruction.

Table 10. Description of Assessment Components for Criteria F of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Assessment	(F) Data are reviewed regularly by administrators and teachers, and instruction and support are adjusted accordingly across the district.	<p>1. Districts support schools by ensuring that teachers are provided the time needed to conduct regularly scheduled data meetings using district protocols and procedures to:</p> <ul style="list-style-type: none"> a) Review results of literacy performance assessments on an ongoing basis (e.g., every 2-4 weeks for students below benchmark levels and 3-5 times/year for those at/above benchmark level). b) Make necessary adjustments to literacy instruction programs as indicated by the data. Periodic school and district-level data summits are scheduled (part-day meetings of literacy leadership teams 3-5 times/year) for more comprehensive data review and planning purposes. <p>2. Based on the review of data, district leaders participate in literacy team meetings at the school level in order to assist with systems-level problem solving and identify possible professional development needs and district supports.</p>

On average, data are not being reviewed regularly by administrators and teachers to adjust instruction and support in grades 9 to 12 ($M=0.5$, $SD=0.9$ on a scale of 0 to 3). The majority of districts (79.0%, $n=256$) identified that they are not consistently ensuring time for teachers to meet regularly in data teams to “review results of literacy performance assessments on an ongoing basis” nor do they provide time for data teams to “make necessary adjustments to literacy instruction programs as indicated by the data.” Of the districts that completed the LLNA, some (31.8%, $n=103$) do not have a regularly scheduled data review team established for literacy instruction and others (47.22%, $n=153$) have data teams that are “emerging.” Additionally, a substantial number of the districts (73.4%, $n=238$) do not consistently have district leaders as members of the “literacy team meetings at the school level in order to assist with systems-level problem solving and identify possible professional development needs and district supports” for literacy instruction at the high school level. The frequency distribution of

districts’ self-evaluations of their use of assessment for criteria F as it applies to their high school programs is listed in Table 11.

Table 11. Frequency Distribution of Assessment for Criteria F of the LLNA

Strategy and Action from the LLNA	F.1		F.2	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	16	4.9%	19	5.9%
In Place	52	16.1%	67	20.7%
Emerging	153	47.2%	130	40.1%
Not in Place	103	31.8%	108	33.3%
	n=324	100%	n=324	100%

The use of both formative and summative assessment data to make informed decisions concerning literacy instruction at the high school level is imperative to maintaining a strong secondary academic program. Access to quality assessment data and knowledge of how to use the data to positively affect instructional changes for teachers and administrators are important components of implementing a comprehensive literacy framework at the secondary level.

4.2.3 Instruction

The component of instruction for the LLNA included elements of classroom instruction, supervision of instruction, and professional development for educators to improve instructional practice. The first aspect of instruction that districts evaluated for their secondary programs was the use of explicit instruction on the elements of literacy “including phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing.” The misconception that reading is taught independently at the elementary level is addressed through this criteria descriptor, which is listed in Table 12.

Table 12. Description of Instruction Components for Criteria A of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Instruction	(A) Literacy instruction is explicitly organized on a grade-appropriate basis around the essential elements of literacy including phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing.	1. The district has established an instructional model that addresses all of the essential elements including phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing.

Most of the districts identified that they have an emerging “instructional model that addresses” the essential elements of literacy at the high school level (M=1.3, SD=0.9 on a scale of 0 to 3). Additionally, very few districts (7.7%, n=25) identified this area of literacy as an area of strength in their high school. Table 13 illustrates the frequency distribution of districts’ evaluations of criteria A for the component of instruction.

Table 13. Frequency Distribution of High Schools’ Use of Instruction for Criteria A of the LLNA

Strategy and Action from the LLNA	A.1	
	Frequency	Percentage
Area of Strength	25	7.7%
In Place	103	31.8%
Emerging	126	38.9%
Not in Place	70	21.6%
	n=324	100%

Additionally, under the component of instruction, districts identified that school administrators do provide ongoing support for literacy instruction at the secondary level through walk-through observations, but their assistance with supporting literacy meetings is not a strength in most districts. The criteria districts used to evaluate their school administrators as a component of their literacy framework is described in Table 14.

Table 14. Description of Instruction Components for Criteria B of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Instruction	(B) School administrators are strong instructional leaders and ongoing support is provided for this role.	1. School administrators are supported in conducting regularly scheduled instructional walk-throughs to ensure that effective instruction is being provided to all students and programs are being implemented with fidelity. 3. School administrators are assisted in (a) providing structure and support for grade level and school level literacy team meetings and (b) participating in them directly or indirectly through briefings following the meetings.

Comprehensive literacy plans require administrative leadership in both instructional observations and literacy team meetings. On average, principals are emerging as school leaders in high schools and ongoing support is beginning to be provided for these roles ($M=1.5$, $SD=0.9$ on a scale of 0 to 3). The majority of high school administrators (63%, $n=204$) in Pennsylvania conduct “regularly scheduled instructional walk-throughs to ensure that effective instruction is being implement with fidelity.” However, the majority of districts (60.8%, $n=197$) identified that school administrators are not supported to assist with the “structure and support for grade level and school level literacy team meetings” nor are they supported in participating in the meetings. Table 15 illustrates the frequency distribution of districts’ evaluations of their instructional practice for Criteria B of the LLNA.

Table 15. Frequency Distribution of Instruction for Criteria B of the LLNA

Strategy and Action from the LLNA	B.1		B.3	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	60	18.5%	34	10.5%
In Place	144	44.4%	93	28.7%
Emerging	101	31.2%	118	36.4%
Not in Place	19	5.9%	79	24.4%
	n=324	100%	n=324	100%

The incorporation of effective literacy instruction across the curriculum is another necessary element of a comprehensive literacy framework districts evaluated through the LLNA. Table 16 provides a description of the criteria districts used to evaluate their instructional programs and instructional delivery of teachers to support literacy instruction at the secondary level.

Table 16. Description of Instruction Components for Criteria C and G of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Instruction	(C) The district provides sufficient instructional time in literacy for all students to learn.	1. A suggested minimum amount of literacy instruction is provided to all students as follows: <ul style="list-style-type: none"> • Grades 9-12: 2-4 hours of literacy-connected instruction and practice that takes place across the instructional areas.
	(G) Effective teacher delivery of robust reading instruction is promoted across the district.	1. District personnel work with building administrators to ensure that teachers across the district are incorporating features of effective delivery of literacy instruction.

On average, most high schools are not providing sufficient time for literacy instruction across the curriculum (M=1.4, SD=1.0 on a scale of 0 to 3). Few schools (14.8%, n=48) identified that the implementation of the suggested “2-4 hours of literacy-connected instruction and practice across the instructional areas” of grades 9-12 is a strength of their academic program; whereas, most schools (52.8%, n=171) either do not have the time allotted for literacy instruction across the content areas or it is emerging. Moreover, on average school districts do not promote reading instruction in grades 9 to 12, and high school programs are beginning to have “effective teacher delivery of robust reading instruction” (M=1.4, SD=0.8 on a scale of 0 to 3). In most high schools (56.7%, n=184) teachers and other district personnel are not working with administrators to ensure effective literacy instructional strategies are implemented across the secondary curriculum. Table 17 illustrates the frequency distribution of the districts’ self-

evaluations of their support of school administrators to support a literacy framework and their support of secondary teachers to implement literacy instruction, respectively.

Table 17. Frequency Distribution of Instruction for Criteria C and G

Strategy and Action	C.1		G.1	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	48	14.8%	29	9.0%
In Place	105	32.4%	111	34.3%
Emerging	104	32.1%	135	41.7%
Not in Place	67	20.7%	49	15.0%
	n=324		n=324	

Overall, data show that the component of instruction as part of a comprehensive literacy framework is weak across high schools in Pennsylvania. The essential elements of effective literacy instruction and the necessary time for teachers to connect literacy to content instruction are not areas of strength in most high schools. Additionally, in most districts, school administrators are not supported as instructional leaders in the area of literacy instruction.

4.2.4 Professional Learning and Practice

Another major component of a comprehensive literacy framework for a district includes on-going professional development for teachers and administrators to continually improve their implementation and supervision of literacy at the secondary level, respectively. The LLNA included three major strategies that districts evaluated, and collected from all three are included in this study. Table 18 describes the criteria school districts used to evaluate their use of professional development. It focuses on the alignment of district professional development with Pennsylvania initiatives to better utilize resources and to create effective learning opportunities for teachers.

Table 18. Description of Professional Learning and Practice Components for Criteria A of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Professional Learning and Practice	(A) The most strategic and productive use of professional learning resources are provided and aligned with Pennsylvania Educational Initiatives (IDEA, Title I, Title III, etc.)	<ol style="list-style-type: none"> 1. Professional development efforts are aligned to leverage resources and ensure a cohesive plan that addresses the needs of all learners (i.e. students, teachers). This alignment is sustained and focused across years. 2. District professional development time (e.g., staff development days, late starts, early dismissals) is utilized strategically by focusing on content that will result in meeting district-reading goals and by sustaining that focus over time.

The high schools that participated in the needs assessments, reported on average that professional developments is beginning to be productive and strategic in its alignment with Pennsylvania Educational Initiatives (M=1.4, SD=0.8 on a scale of 0 to 3). The majority of school districts (57.1%, n=185) recognize that professional development for literacy instruction is not part of cohesive plan that leverages resources in an effort to address the needs of all learners. Moreover, few districts (8.3%, n=27) were confident that their alignment of professional learning to state initiatives is strong at the secondary level. A larger percentage of districts (63.3%, n=205) do not feel that “professional development time is utilized strategically by focusing on content that will result in meeting district-reading goals and by sustaining that focus over time.” Table 19 illustrates the frequency distribution of the current perception of professional development as it applies to the criteria descriptors listed in Table 18 above.

Table 19. Frequency Distribution of High School Professional Learning and Practice for Criteria A of the LLNA

Strategy and Action from the LLNA	A.1		A.2	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	27	8.3%	21	6.5%
In Place	112	34.6%	98	30.2%
Emerging	155	47.8%	164	50.6%
Not in Place	30	9.3%	41	12.7%
	n=324	100%	n=324	100%

The quality of professional development for literacy at the secondary level did not fare well in district self-evaluations. Districts used the strategies listed in Table 20 to evaluate the quality of their professional development programs.

Table 20. Description of Professional Learning and Practice Components for Criteria B of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Professional Learning and Practice	(B) Professional learning meets standards for effective professional learning.	<p>1. All professional learning reflects the characteristics of effective professional learning programs. Professional development is</p> <ul style="list-style-type: none"> a) Focused on goals and guided by assessment data b) Ongoing c) Engaging and interactive d) Collaborative (including Professional Learning Communities) e) Job-embedded. <p>2. Application of the content to classroom instruction is stressed. Impact of professional learning on student and teacher learning is measured. Coaching, instructional supervision, ongoing teacher collaboration, peer-coaching, and related strategies are used for this purpose.</p>

The school districts, on average, reported that they are beginning to develop professional development that “meets standards for effective professional learning” (M=1.3, SD=0.8 on a scale of 0 to 3). Most districts (54.9%, n=178) recognized that their high schools do not have professional development in place that is “focused on goals and guided by assessment data;

ongoing; engaging and interactive; collaborative; and or job-embedded.” Furthermore, few districts (9.9%, n=32) identified the quality of their professional development as a strength. Additionally, most of the districts (71.9%, n=233) are not stressing the “application of the content to classroom instruction” and they are not measuring the “impact of professional learning on student and teacher learning.” The data illustrates that the quality of professional development for literacy instruction at the secondary level is in need of improvement. Table 21 provides a more detailed illustration of the frequency distribution of the districts’ self-evaluations of the quality of professional development provided at the secondary level.

Table 21. Frequency Distribution of High School Professional Learning and Practice for Criteria B of LLNA

Strategy and Action from the LLNA	B.1		B.2	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	32	9.9%	16	4.9%
In Place	114	35.2%	75	23.2%
Emerging	157	48.4%	185	57.1%
Not in Place	21	6.5%	48	14.8%
	n=324	100%	n=324	100%

The LLNA data highlights a lack of differentiation of professional learning for the teachers and administrators responsible for literacy instruction. Table 22 details the criteria districts used to evaluate the differentiation of professional development for staff.

Table 22. Description of Professional Learning and Practice Components for Criteria C of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Professional Learning and Practice	(C) Differentiated professional learning is provided for all staff that teach or supervise literacy.	<p>1. Initial and ongoing in-class professional learning is provided specific to the literacy programs school personnel will be teaching:</p> <ul style="list-style-type: none"> a) Before the start of the year, teachers new to a building receive detailed preparation in the school’s literacy model, literacy assessments, and how to implement the materials they will be using. b) Periodically (at least once a year), returning teachers receive follow up guidance to enhance implementation of the core, supplemental, and intervention materials. c) Instructional specialists (Title I, special education, ELL and Gifted Education specialists) are included in literacy professional learning that classroom teachers receive. <p>2. Principals attend district and building-level professional learning sessions on literacy elements, materials and assessments. Scheduling conflicts with district leadership meetings are avoided on these dates. Additional professional learning is provided for principals on becoming instructional leaders at regular sessions throughout the school year.</p> <p>4. Teaching staff are provided with opportunities to collaborate, study, observe others, visit model demonstration sites, and make plans to improve instruction.</p> <p>6. The district is committed to integrating literacy across the instructional areas at the middle and high school levels. Professional development and ongoing in-class support necessary to make this happen are provided including subject-specific comprehension and vocabulary strategies.</p>

On average, school districts reported that “initial and ongoing in-class professional learning” that supports the school’s literacy program for new and returning professionals is emerging at the secondary level (M=1.2, SD=0.8 on a scale of 0 to 3). The majority of districts (81.2%, n=263) do not have an established differentiated professional development plan to

support the literacy program at the secondary level for teachers with different needs. Additionally, the majority of high school principals do not “attend district and building-level professional learning sessions on literacy elements, materials and assessments,” nor are they provided with “regular sessions throughout the school year” on professional development necessary for acting as instructional leaders for literacy education. Moreover, most districts (66.7%, n=216) are not providing secondary teachers “with opportunities to collaborate, study, observe others, visit model demonstration sites, or make plans to improve instruction.” Although only some districts (34.2%, n=111) are committed to “integrating literacy across the instructional areas at the middle and high school levels” and “professional development and ongoing in-class support necessary to make this happen are provided including subject-specific comprehension and vocabulary strategies,” the majority of districts (65.8%, n=213) have not established a commitment to secondary literacy across the curriculum. Table 23 details the frequency distribution of each of the descriptors districts used to evaluate their differentiation of professional development for literacy.

Table 23. Frequency Distribution of High School Professional Learning and Practice for Criteria C

Strategy and Action from the LLNA	C.1		C.2		C.4		C.6	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Area of Strength	11	3.4%	21	6.5%	21	6.5%	27	8.33%
In Place	50	15.4%	100	30.9%	87	26.8%	84	25.93%
Emerging	133	41.1%	141	43.5%	168	51.9%	169	52.16%
Not in Place	130	40.1%	62	19.1%	48	14.8%	44	13.58%
	n=324	100%	n=324	100%	n=324	100%	n=324	100%

4.2.5 Literacy Leadership, Goals, and Sustainability

The KTO data collected for the component of Literacy Leadership, Goals, and Sustainability focused on the districts’ capacity building to support secondary literacy through district and school leadership. The first strategy used to evaluate schools’ literacy leadership capacity was the districts’ commitment to financially supporting literacy and maintaining literacy as a district priority. Table 24 provides the specific descriptor districts’ used to evaluate the strength of their literacy leadership at the district level.

Table 24. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria A of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Literacy Leadership, Goals, and Sustainability	(A) Strong literacy leadership is provided at the district level.	2. Policies, personnel, budgets, training, and other operational resources are used as fiscal and administrative strategies to produce improved outcomes at the district and school levels. 5. Literacy is kept “front and center” as a district priority. Positive results are acknowledged and consistently high-performing and high-growth schools are recognized.

Districts reported that on average strong literacy leadership is provided at the district level (M=1.6, SD=0.8 on a scale of 0 to 3). The majority of districts (55.2%, n=179) identified that they have resources necessary to fiscally and administratively support literacy at the high school level. Additionally, school districts (49.7%, n=161) maintain secondary literacy as a district priority. Table 25 provides the frequency distribution of how districts self-evaluated their literacy leadership at the district level.

Table 25. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria A

Strategy and Action from the LLNA	A.2		A.5	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	36	11.1%	49	15.1%
In Place	143	44.1%	112	34.6%
Emerging	124	38.3%	128	39.5%
Not in Place	21	6.5%	35	10.8%
	n=324	100%	n=324	100%

To drive instructional literacy improvement, school-level leaders need the support of the district-level leaders. The Literacy Planning Teams evaluated the districts’ leadership to support the school-level leadership through the coordination of the literacy program, meetings, and professional development for principals. Table 26 describes the criteria districts used to evaluate the support of the district-level leadership.

Table 26. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria B of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Literacy Leadership, Goals, and Sustainability	(B) Strong literacy leadership at all levels is supported by strong literacy leadership at the district level.	<ol style="list-style-type: none"> 1. Coordination of literacy goals, assessment, instruction, and professional development at the school and district levels is emphasized. 3. The literacy coordinator or district literacy leadership team (Birth-Grade 12) performs the functions of literacy coordination including <ol style="list-style-type: none"> (a) Meeting regularly using a well-planned agenda and providing meeting notes/minutes in a timely manner. (b) Supporting building principals and reading/intervention specialists (c) Making regular walk-through visits to classrooms to see evidence-based and effective literacy instruction in action (d) Coordinating literacy data collection and analysis (e) Coordinating district-level professional development and data retreats in literacy. 5. The district provides leadership and regular meetings times for professional learning teams. The focus is on the following questions: <ol style="list-style-type: none"> a. What do we want students to learn? b. How will we know when they have learned it? c. What will we do when they haven't learned it? 8. Supervision and ongoing support needed for principals to fulfill their roles as instructional leaders are provided by district personnel.

On average, school districts reported that literacy leadership at all levels is not supported by “strong literacy leadership at the district level” (M=1.2, SD=0.9 on a scale of 0 to 3). The comprehensive coordination of the literacy program components is not emphasized in most districts in Pennsylvania (59.3%, n=192). Additionally, nearly all districts (75.6%, n=245) do not have an established literacy coordinator or district literacy leadership team that oversees the implementation of the literacy plan at the high school level. Nor do most districts (68.6%, n=222) provide meetings for school leaders or other educators to collaborate as learning teams to evaluate and improve the literacy programs. Although, the data illustrates that districts do not have a comprehensive plan, identified literacy coordinator, or time for school leaders to collaborate to implement a comprehensive literacy plan at the high school level, a substantial number of districts (53.7%, n=174) perceive that they have strong “supervision and ongoing support needed for principals to fulfill their roles as instructional leaders.”

Table 27. Frequency Distribution of Literacy Leadership, Goals, and Sustainability for Criteria B

Strategy and Action from the LLNA	B.1		B.3		B.5		B.8	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Area of Strength	27	8.3%	18	5.6%	28	8.6%	45	13.9%
In Place	105	32.4%	61	18.8%	74	22.8%	129	39.8%
Emerging	150	46.3%	56	17.3%	145	44.8%	110	34.0%
Not in Place	42	13.0%	189	58.3%	77	23.8%	40	12.3%
	n=324	100%	n=324	100%	n=324		n=324	

Another strategy districts evaluated under Literacy Leadership, Goals, and Sustainability was their capacity to support effective literacy practices through collaboration with other educational entities in Pennsylvania. Specifically, districts evaluated their use of local intermediate unit and their regional PaTTAN consultants to provide professional learning opportunities to educators and administrators across the district. Table 28 outlines the criteria

districts used to evaluate their readiness to “build capacity from within to support effective literacy practices” at the high school level.

Table 28. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria C of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Literacy Leadership, Goals, and Sustainability	(C) The district has built capacity from within to support effective literacy practices.	3. District uses their local Intermediate Unit to provide literacy professional learning to build district capacity. 4. District uses their regional PaTTAN consultants to provide professional learning and to build district capacity.

On average, school districts also reported that they have not “built capacity from within to support effective literacy practices” (M=1.3, SD=0.9 on a scale of 0 to 3). Use of the local Intermediate Units an effort to support literacy capacity at the high school level is not being fully utilized by half of the school districts (50%, n=162). Additionally, most districts (67.3%, n=218) do not have an established process of using their “regional PaTTAN consultants to provide professional learning and to build district capacity.” Overall, these educational agencies are under-utilized when it comes to supporting literacy at the secondary level. Table 29 presents the frequency distribution of districts’ evaluation of their use of local Intermediate Unit and regional PaTTAN office, respectively.

Table 29. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria C

Strategy and Action from the LLNA	C.3		C.4	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	42	13.0%	14	4.3%
In Place	120	37.0%	92	28.4%
Emerging	116	35.8%	127	39.2%
Not in Place	46	14.2%	91	28.1%
	n=324	100%	n=324	100%

Districts also evaluated their literacy planning to guide literacy improvement efforts as they apply to professional development. The two criteria used in this study focused on the high schools' development of a School Literacy Plan and the use of the School Literacy Plan to guide literacy improvement. Table 30 provides the strategy and actions recommended to support the implementation of a literacy framework as it pertains to Literacy Leadership, Goals and Sustainability for districts and schools through literacy planning and guiding improvement.

Table 30. Description of Literacy Leadership, Goals, and Sustainability Components for Criteria D of the LLNA

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Literacy Leadership, Goals, and Sustainability	(D) District and school literacy planning is used to guide literacy improvement efforts.	3. Schools are expected to develop a School Literacy Plan that is aligned with the District Literacy Plan; it is used to guide literacy improvement. 4. Schools use their plan to guide literacy improvement.

At the high school level, a district and school literacy plan to guide a comprehensive literacy improvement effort is not in place ($M=0.4$, $SD=0.7$ on a scale of 0 to 3). The majority of districts (64.5%, $n=209$) do not have a School Literacy Plan at the secondary level. Not surprisingly, most of the districts (67.6%, $n=219$) do not use a plan to guide literacy improvement within their high schools. Table 31 provides the frequency distribution of the districts' self-evaluations of their literacy planning and its use to guide and improve literacy instruction at the high school level.

Table 31. Frequency Distribution of High School Literacy Leadership, Goals, and Sustainability for Criteria D

Strategy and Action from the LLNA	D.3		D.4	
	Frequency	Percentage	Frequency	Percentage
Area of Strength	2	0.6%	7	2.2%
In Place	25	7.7%	25	7.7%
Emerging	88	27.2%	73	22.5%
Not in Place	209	64.5%	219	67.6%
	$n=324$	100%	$n=324$	100%

The KTO data provides a comprehensive look at the current capacity of high schools to implement a literacy framework to improve secondary literacy skills among students in grades 9-12. However, the numbers are composite scores of Literacy Planning Teams' perceptions of their current state of literacy preparedness. Therefore, this study also included interviews with five high school principals to provide a more detailed account of the strengths and perceived areas of needed improvement to implement a comprehensive literacy plan at the high school level. The interviews addressed the perceived needs of principals to prepare to lead the implementation of literacy standards across the curriculum.

4.3 VARIATION OF CONTENT LITERACY UNDERSTANDING AMONGST PRINCIPALS

The principals' responses to what they think literacy instruction in the content areas looks like across a secondary curriculum produced a variety of responses. None of them articulated specific components of literacy instruction as it pertains to the various content areas or in a secondary setting. For purposes of this study, literacy is defined as the level of reading and writing skills that learners need in an academic subject to comprehend and respond to ideas and texts used for instructional purposes (Brumley, 2010; Shanahan & Shanahan, 2008; Torgesen et al., 2007). Content literacy uses reading, writing, speaking, performing and other modes of "symbolic communication" (Alvermann, 2002, p.190) to support students while they learn information and think critically in various disciplines that are situated in specific social, cultural, historical and institutional contexts and engaged in for specific purposes relative to those

contexts (Moje, Dillon, & O'Brien, 2010; O'Brien, Stewart, & Moje, 1995; Shanahan & Shanahan, 2008).

Principal A perceives literacy instruction at the high school to be “grounded in a curriculum that is tied to standards where it is evident that the eligible content is being covered.” Whereas, Principal B’s perception of literacy is focused on authentic reading and writing strategies used in all academic areas to achieve “literacy across the building.” Principal B perceives the onus of literacy instruction to be the responsibility of every teacher in the building. Whereas, Principal C perceives literacy instruction as a support for “what’s happening in...English classes or literature classes.” Additionally, Principal C depends on his English department to develop best practices for literacy instruction based on the “standards or looking at Common Core.” Principal D defined literacy instruction as vocabulary, comprehension, and writing that “can’t be taught just in the English department.” Finally, Principal E perceives that literacy instruction should be focused on non-fiction text as it “relates to the Common Core.” Although the principals’ explanations of what literacy instruction would look like across a secondary curriculum were ambiguous, they all agreed that literacy instruction is the responsibility of every teacher in the secondary building.

All five principals voiced that their experiences with secondary literacy instruction have been limited. They consistently described their teaching experiences as “traditional” with no content expertise in reading instruction. Additionally, principals presented their belief that literacy instruction at the secondary level is necessary; however, they have minimal experience with implementing literacy instruction. Although Principal A taught English as a high school teacher, he stated that literacy instruction was never a focus when he taught. Principal B recognized literacy as the “backbone for everything that happens in schools,” but his time as a

social studies teacher and dean of students provided him with minimal experience with literacy instruction. Similarly, Principals C and D, a former math and biology teachers, respectively, recalled literacy instruction as brief lessons to prepare students for the Pennsylvania System of School Assessment (PSSA) without any deliberate connection to their content areas. Finally, the majority of Principal E's experience was in an emotional support classroom, which he believes presented little opportunity for him to work on literacy skills with his students.

4.4 PERCEIVED PROFESSIONAL DEVELOPMENT NEEDS OF SECONDARY PRINCIPALS

Effective secondary principals are not masters of all content areas, but they have in-depth knowledge of strong instructional practices and are able to support instructional growth among their teaching staff. The implementation process of the PA Core standards for literacy instruction in the content areas calls on their ability to lead teachers to refining their instructional practices to embed literacy instruction. Therefore, the professional development needs of secondary principals vary based on their knowledge of the following: effective secondary literacy instructional practices across the curriculum, curriculum development for secondary literacy, new content literacy standards, and effective professional development for content teachers in literacy instruction. Throughout the interviews, four themes emerged, which are listed in Table 32 below:

Table 32. Themes about Principals' Perceived Professional Development Needs

Themes
Better Identification of the Components of Effective Literacy Instruction
Knowledge of PA Core Standards for Literacy
Confidence in Providing Teachers with Professional Development on Literacy Instruction
Development of Processes for Affecting Cultural Change

4.4.1 Better Identification of the Components of Effective Literacy Instruction

Another theme that emerged from the data is that the principals were confident in their ability to provide feedback on standard lesson design and questioning techniques, but they were all unsure of how to supervise and evaluate literacy instruction in the various content areas. The general consensus was that they need professional development on the instructional strategies and assessment methodologies for content literacy. Principal C said he needs to become familiar with “what good instruction looks like around literacy; probably more so across the curriculum.” All of the other principals had similar remarks.

The data illustrated that the principals were confident in evaluating instruction, especially with the adoption of Charlotte Danielson's Framework for Teaching, which is the new evaluation system for effective instruction in the state of Pennsylvania. Principal A commented that the new Teacher Effectiveness model that incorporates Danielson’s Framework for Teaching is a resource he can rely on to support his teachers because he was involved in training them on the new framework. Additionally, he recognized his need for greater knowledge of literacy instruction to support his staff. He stated that he is not comfortable with the available resources, and he would be more comfortable assessing teachers if they knew what he expected in the

classroom concerning literacy. Principal E also referenced the use of the Danielson framework to support his clinical observations as a resource to illuminate the components of the lesson structure he is evaluating; however, he also stated that he is not comfortable helping teachers with literacy strategies in the content areas because “it wasn’t [his] focus.” His use of Teachscape, a web-based education evaluation management system, has helped him hone his skill of observing lessons and evaluating the questioning techniques of teachers, but the questions are not necessarily focused on literacy.

Principal B also recognized his need for more professional development surrounding the specific components of literacy instruction. He explained the need for authentic professional development that focuses solely on literacy instruction as it applies to a secondary school:

And for me, that professional development needs to be more about when you go into how a lesson is structured, how instructional strategies are used. Kind of like a cycle, I look at it as a big circle. You have to use some lecture, you have to use some grouping, there has to be different ways you do things. And for me, a way for administrators to be on the same page, to promote that literacy to be able to say, you missed a piece here this is a piece you could have done this a little different. Instead of going in with so many things to think about as it pertains to evaluation. You don’t get a chance to focus in on the question, so where was the piece on literacy?

Similarly, Principal C is confident in his ability to evaluate the “flow of the class” and how teachers use instructional strategies and assessment to meet objectives in all content areas; however, he voiced his reservations with evaluating instruction specific content literacy. Principal D also expressed his need to be able to support his teachers, especially his English teachers who he sees as leading most of the change. His confidence is in his ability to give

“anecdotal information to the staff” on the importance of literacy instruction in the content classroom; however, he too verbalized the need for more resources to use with his teachers.

4.4.2 Knowledge of PA Core Standards for Literacy

The principals interviewed commented on their awareness of the transition to the Core standards for literacy; however, they also identified their own need for a better understanding of the standards and how they apply to the content areas. Their reasons for needing to know more about the PA Core standards were specific to their schools’ needs and their personal needs.

The two principals of urban high schools acknowledge that the literacy standards are needed to support all academic areas for the students they serve; however, they had different needs as they pertain to the standards. Principal B stated that for urban schools, literacy is seen as a “backbone” to implement change to improve student achievement, and although he feels that his school’s curriculum is aligned to the new standards, he needs more knowledge on how to support his teachers’ implementation of the standards. Specifically, he would like to know the different ways literacy is embedded in the content areas and how he can empower his teachers to integrate more instructional strategies through his best practice sharing. Principal A was candid in his need to know more about the particulars of the Core standards and how it applies to the high school curriculum:

I feel that the Common Core and everyone are talking from 10,000 feet. At least in my experience, the conversation isn’t about the nuts and bolts yet. Everyone knew that this was coming, but I don’t know how many people are doing a lot about it. The districts that have it the easiest are the ones who have it all together to start with. I don’t know if it is, you could make a case that it’s easy to make it if you don’t have

anything together because you don't have anything to undo, but there's not a conversation of common language yet. Well, I don't even feel comfortable talking about it.

Principals A and B suggested that the "day to day instruction of the urban child...is different." Therefore, they perceive their need for professional development on the new literacy standards through the lens of an urban educator and want authentic professional development for the context in which they work.

On the opposite end of the spectrum, Principal C recognized that he would benefit from an overview of the new standards to familiarize himself with how they should be embedded in the school curriculum; however, he also recognized that with over 90% of his students scoring proficient on state reading assessments, that literacy instruction is not a focus for his school:

This is probably a good example. I'm coming from a district that we have good results test wise, not because, I mean some is based on what I'm doing, but a lot of it is because our kids come prepared ... so we just haven't had, in the area of literacy, a problem. That has probably been our strong suit all throughout, kindergarten through 12th grade, even with our Keystone results that we've had. We're really pleased with our literature results through our juniors. Actually, for our underclassmen, too, that we have had tested on.

That's really the thing, it's not been an area of focus for us.

Unlike the principals from the urban high schools, Principal C's need for a generalized overview of the standards is not catalyzed by his students' needs, but more for his own knowledge of the current state standards.

Similarly, Principal D expressed a need for a better understanding of the key components of the Core standards for literacy. He was concerned with the depth of the new standards. When

asked what professional development he needs to support his staff, he said: “The time to digest what’s expected through Common Core. I mean we’re so wide and deep, where to start? Boil it down, what’s important.” Although his assistant superintendent for secondary education is responsible for the high school curriculum, Principal D acknowledged his own need to understand the scope of the standards as they apply across the curriculum.

4.4.3 Confidence in Providing Teachers with Professional Development on Literacy

Instruction

A resounding theme throughout the interviews was the limited confidence principals possessed in providing teachers with professional development on literacy instruction. The limitation they revealed was through two lenses. Some principals acknowledge what they perceived as their inability to conduct professional development for teachers and the need to rely on other agencies or staff members to lead the professional development. The other limitation was due to limited professional development time for literacy instruction. Every principal mentioned that there are other initiatives within the districts that require professional development time, and the fragmentation of professional development left little time to improve content teachers’ awareness of the new literacy standards or their ability to embed literacy standards across the curriculum.

Principals B, D, and E use other agencies and or staff members to lead professional development in their buildings. Principal B’s school has a newly created literacy committee that he foresees leading most of the professional development for teachers via best practice sharing. He is responsible for aligning the professional development around specific building themes, but he is confident that his staff will learn more from their peers than from him. He stated:

I mentioned earlier before about the learning targets, literacy, and the literacy project. I have every department present ... what they do instructionally, so instructional strategies around literacy. So, I'm probably going to shift gears and have the new literacy committee start to do those things. Present their strategy of the month and what it is [and] what they want to do based on how they define literacy.

Principal D explained that many of his school's in-service trainings are based on the "train the trainer type deal," which means the district sends one employee to professional development training and then relies on that one person to disseminate the information to the faculty members. Additionally, Principal D's district is bringing in the outside professional development of Lead to Learn. He stated that through Lead to Learn, the whole English department will participate in the in-service they provide:

We have all of the English teachers 9-12, two science, two math, and two social studies. And it's all about strategies, and they will come in and assess the staff and give them a report back to them and they'll be in 14 times with each teacher. We've been doing it in the elementary for about five years. We finally said, please bring it to the secondary campus, and we're doing just wholesale in the English department, and then we'll get it out to everyone. That one is going to be a big change for staff.

Although Principal D did not clearly describe a professional development program centered on the implementation of the Core literacy standards, he did describe the need to provide outside training for his staff. Principal E was also candid in his need to pull outside resources to provide professional development. He stated, "I would have to rely on someone else. And I wouldn't necessarily see it because, again, it goes back to, how well are our kids doing on tests." Although he is unable to provide the professional development his staff may need to implement

the new literacy standards, the district's willingness to provide professional development is stifled by student achievement on one standards based test.

The increasing demand to implement state mandated initiatives and aspects of grant requirements limits the available professional development time allotted to improving literacy instruction across the curriculum. All of the principals mentioned that some professional development time has been used for the new Teacher Effectiveness model that the Pennsylvania Department of Education (PDE) is planning to institute for the 2013-2014 school year. Principal A seemed to be the most affected by grant requirements. He said, "So much of what we do is driven by our grant requirements. For example, we are a KtO district PreK-8, but if I share teachers, I would lose those teachers. So now we're Race to the Top with Teacher Effectiveness, and now I have to pull those teachers into that. There's a fragmentation that goes on in a small district." Additionally, Principal A stated that the professional development he instituted covered "the big-ticket things," such as discipline and teacher evaluation. Similarly, Principal B also focused on other concepts for professional development, which he conducts through best practice sharing based on certain themes. For the past few years, the teachers in Principal B's high school have focused on instructional practice through lesson study—they film one another teaching and then critique the lesson together. However, Principal B did comment "it is a challenge sometimes when you focus professional development because something will come along that you read or you love, and you'll think there is something they need to see, but there's no room for them to see it because it's not aligned with the theme." His realization that they are inundated with potential professional development opportunities illustrates his awareness that as principal it is easy to minimize the amount of time spent on improving teachers' abilities to embed literacy instruction across the content areas.

Much like the other principals, Principal E recognized the limited confidence he had in providing teachers with professional development on literacy instruction, mainly because of time constraints and a focus on preparing students for the new standards based assessment. He stated, “you have x-number of professional development days with teachers, which isn’t enough, and then you say, we can keep people after, but they want to be compensated for their time, then time becomes a factor.” Additionally, he elaborated on other professional development topics he feels are important to present to teachers: School Performance Profile and curriculum mapping. With the limited amount of professional development time and the many topics to cover throughout the year, there is a limited amount of professional development time to spend on literacy instruction. Furthermore, throughout our conversation, he talked about how teachers need to “get away from the fiction aspect of [text] and incorporate more non-fiction into what their instruction is.” He referenced that the push to focus more on non-fiction text comes from the eligible content tested on the Keystone Literature Exam, which is the assessment Pennsylvania uses to measure student achievement. The Keystone Literature Exam has two tested modules: fiction and non-fiction. Principal E stated that the onus of preparing students for the Keystone Literature Exam is not solely the English teachers’ responsibility:

... it’s having the conversation with teachers across the board to have teachers change from content to the skills and the application of the skills. So really your non-English people should be using the skills [students] are learning in the English department: talking about text and text analysis and interpretation in those classes. So that’s the shift to get those people to, who are the core instructors, to get away from appreciation, that is good, but to skills, and that’s the conversation you now have at department meetings. They don’t necessarily like to hear it, but skills, skills, skills, skills.

Principal E recognizes that all teachers must prepare students for the literature exam; however, his confidence in preparing them is weak based on what he perceives to be a limited availability of time and the need to satisfy other professional development needs.

4.4.4 Development of Processes for Affecting Cultural Change

Many of the principals expressed concern with their ability to affect change in their current school culture. The mantra that high school teachers are content driven and do not feel a sense of urgency or responsibility for teaching literacy skills was one of the most cited challenges principals face as they transition to the PA Core Standards for literacy. Principals recognized that they need a method for addressing content teachers' natural inclination to focus on content material, and not how students are accessing and communicating the information. Principals were also able to articulate their need for their own personal knowledge of instructional strategies to share with teachers and a method for monitoring teacher progress of integrating content literacy. All areas of concern were identified as components necessary to change the school culture. The principals interviewed in this study expressed their perceived challenges with building school capacity to affect a cultural change to implement the new literacy standards as an obstacle they would have to overcome.

Principal A specifically cited "staff buy in" as the greatest challenge to the transition process. He discussed the need for professional development on basic instructional strategies necessary to implement literacy in the content areas. He said that his staff is "able to do the nuts and bolts of putting together a curriculum, but the day to day instruction of the urban child...is different. So that would be the biggest hurdle, the buy in and professional development."

Additionally, he recognized his need to hone his own knowledge of literacy instruction to support his staff's willingness to implement the new standards. Although he has been the high school principal for only a year, he feels as though he has demonstrated to his staff that they are "going to learn things together, and if [he doesn't] know an answer [he is] going to get it." Principal A feels confident in his ability to lead this change initiative, but he also recognized that he needs more professional development with how to change a school culture that has historically underachieved.

Similarly, Principal B referenced "buy in" as a major challenge to implementing the new PA Core literacy standards. More specifically, he identified the process of changing the school culture as something that needs to be done through the teacher ownership of the process. When asked what the greatest challenge will be to transition to the PA Core, Principal B stated:

I think one of the biggest problems for us is the planning process. For us, there isn't money to plan. [I] want a lead teacher...to build her own community of folks that she can work with to get buy in from each area: art, phys. ed., English, math, science, so on. So getting buy in, so that it is implemented consistently. I have a theme or maybe just a motto: Thus that doesn't get monitored, doesn't get done. And you really don't have time to micromanage a literacy project from an administrative perspective when you manage a lot of discipline in an urban environment, so for us, it's coming up with a way to create buy in and having teachers hold each other accountable with some of the lead teachers who are extraordinary educators. So it is a new way of thinking, and it is not easy for me to think that way. You know, leadership capacity, giving them this shared kind of leadership, giving them the process to run, but I think it is important to think about to get the buy in.

Although Principal B references his discomfort with sharing leadership with these teachers to implement the new literacy standards to influence teacher “buy in,” he is willing to try something new to change the culture of the school. However, the process of building capacity for this school wide initiative is something that he needs to develop.

Although Principal E did not use the phrase “buy in,” he did mention that one of his greatest challenges to implementing the new literacy standards is refining the way content teachers think about literacy instruction as it pertains to their content area. His perception is that a person becomes a teacher because of his or her love of the subject matter, and his or her style of teaching is predicated on what he or she was exposed to in school. He said that although teachers have courses on instructional methodology in their undergraduate coursework, they tend to rely on the teaching style of a favorite teacher. Additionally, he feels confident that he can share effective instructional strategies with his teachers, but they will undoubtedly be concerned with their ability to cover the content material. He recognized that his teachers’ naturally tend to think, “that takes time, and I don’t have enough time because I have to do A-Z by the end of the year.” This teacher fear illustrates the principal’s need to refine the curriculum to better align it with the PA Core standards to reduce the amount of material they cover and increase the depth at which they cover it, especially as it pertains to the implementation of literacy skills. Also, Principal E stated that teachers have not traditionally seen themselves as responsible for teaching literacy skills: “high school teachers don’t see themselves as teaching basic literature, they are working under the assumption that kids are coming prepared to...take a selection go through and pull out at least your general information.”

Principal D specifically referenced his social studies teachers as a challenge. He stated, “the biggest challenge would be in social studies because it’s a humongous change of

expectations. They are ingrained with their historical approach, there's some writing, but they're more into the content of history than, give me, compare and contrast, say socialism to capitalism." His response implies that the social studies teachers in his building are driven by the content that they teach, and that expectations of literacy instruction, even if they are specific to social studies, would not be welcomed. Additionally, he mentioned the need to support his teachers' confidence with the implementation process. He commented that like most of his teachers, he was "a science teacher, and [he] did not know" how to embed literacy skills into his instruction because he "didn't go to school" to be a reading teacher.

Principal C, however, was an outlier when it comes to this professional development need. He is confident that his teachers will take the lead on implementing necessary changes to meet the new standards, especially since they aligned their current curriculum with the new PA Core Standards during their two-year transition plan. Moreover, he did not direct any teacher to improve the implementation of literacy instruction across the curriculum, yet the English department chair took it upon herself to work with other content areas to embed writing and reading skills into the core classes. He is working in a school culture where teachers are proactive about implementing new educational changes and initiatives with limited administrative micromanagement.

While discussing their professional development needs to lead literacy instruction, four of the five principals shared that they are not directly responsible for the creation and or implementation of a comprehensive secondary literacy plan. Two of the principals work in districts with central office supervisors of curriculum and instruction; therefore, an employee with more influence over the curriculum is responsible for managing the implementation of the literacy standards across the content areas. Additionally, two other principals deferred the

responsibility of implementing literacy across the content areas to the teachers within their building with the assumption that the teachers are more knowledgeable about content literacy instruction. Lastly, one principal perceives his role in the process as the messenger of the standards. Regardless of the reason, their perceived need to distribute the leadership responsibility was clearly stated and could be a factor in influencing the perception of their professional development needs to lead the implementation of literacy standards across the content areas.

Principals A and D are responsible for supervising and evaluating the teachers in their buildings, but they are not responsible for the curriculum. Principal A stated that he is not responsible for curriculum, but he recognizes the changes that are necessary for his building in order to implement a comprehensive program:

We have a director of curriculum, instruction and assessment whose primary job it would be to make sure those pieces are in place; however, they are not in place. My job moving forward really is going to be, now that I've been through the first year of everything, to really say, ok, now what are the gaps? The problem is that the gaps are so huge that it is going to take a long road. When I say there is so much that needs to be done, there really is a lot that needs to be done; it's not just a matter of updating curriculum, it is a matter of starting from the ground up in most cases. I don't see [literacy instruction] in the content areas. It has to be, it has to be. It has to be K through because when I'm getting the students, I can build off of it.

Principal D stated that he is not "intimately involved in the literacy program," and that the assistant superintendent for secondary education is responsible for curriculum and instruction for grades 7-12. The district uses curriculum meetings hosting upwards of 50 teachers to discuss

curriculum changes and revisions. Additionally, Principal D was not on the district's secondary literacy committee; however, his assistant principal, English teachers, and reading specialists were represented and able to collaborate on the district plan. Therefore, other administrators who he supervises and works with are helping mold the plan.

Similarly to Principal A and D, Principals B and C are not immediately responsible for creating and or implementing a literacy plan in their building. Both principals are distributing the leadership to teachers to lead the implementation process. Principal B recognizes his teachers are valuable assets as the school begins to embrace the implementation of literacy across the content areas. He commented on their instructional skills and knowledge of effective pedagogy as a resource for him:

I think I learn from my teachers here who are like walking educational journals when they are doing peer assessment in their classroom, or they're doing a jigsaw activity that is extraordinary, or assessing children based on certain expectations. I try to learn from those things and find out where they got them. How did you learn to do that and do it so well? And some of them do it every day, so I think that's more of a resource for me than a training.

In a similar fashion, Principal C distributed the leadership to his English department chair by giving her the latitude and time to discuss the necessary changes for literacy across the curriculum during department chair meetings. Principal C embraces the notion that a literacy plan should be "adopted by the school that is standards based or Common Core based, and [uses] your English experts to help promote what's happening in the other content areas." The curriculum used in Principal C's district is a working document, so the teachers meet in subgroup committees to make revisions. The teachers used these subgroup committees to compare their

curriculum to the new standards in order to make necessary adjustments under the guidance of the English department.

Principal E asserted that the implementation process of a literacy plan in his high school is “really in the infancy stage;” however, he was able to speak directly about his role in creating and implementing the plan. He stated:

You go, here’s what the Common Core is, here’s what needs to be addressed, here’s what the change is, and not that you teach to the test, the Common Core is what it is, and its really having an understanding of what the Common Core wants. So you’re going to the IU, you’re reading, you’re doing those things, and then you bring it back to the teachers and you say, here is the shift in what we have to do and put the test aside because the test is one measure of what kids do and not that the test should be the focus, unless you’re in ninth grade and you want a diploma, but here’s what we have to do to get kids to be successful and to have them have that understanding, and it’s really communication. One, it’s me having the knowledge of what the Common Core is, what are the standards, what needs to be addressed, how will students be assessed, what good instructional practices, using Danielson’s Framework, what that looks like, and sharing that with them.

In all cases, the principals perceived the new literacy standards and push for literacy across the content areas as an extrinsic motivator to approach changes within their schools.

4.5 PRINCIPAL AND SCHOOL PREPARATION FOR THE IMPLEMENTATION OF SECONDARY LITERACY STANDARDS IN THE CONTENT AREAS

Although all of the principals interviewed are cognizant of the major changes happening to secondary standards with the implementation of literacy standards across the curriculum, none of them have developed a professional development plan for themselves or their schools to prepare for the implementation process. Additionally, the only sense of urgency to implement literacy instruction across the curriculum came through when they spoke about state standards based testing. Most of the principals had limited knowledge of available resources for principals specifically focused on secondary literacy instruction. Principals view new standards as being imposed on them and they feel as though they have limited ownership of the change initiative; therefore, they have not prepared, nor do they plan to prepare themselves to lead the implementation process of the new literacy standards.

4.5.1 No Current Preparation for the Implementation

Regardless of current student performance on standards based assessments, the size of the high school, or affluence of the district, none of the interviewed principals have participated in any professional development focused on the new literacy standards or the implementation process of literacy across the content areas. Moreover, the principals' responses were concise when asked about what they have already done to prepare for the new standards.

Principals A, C, and D directly stated that they have not done anything to prepare, nor do they plan to do anything at this time. When asked about what he has done to prepare for the new literacy standards, Principal A said, "Nothing. Absolutely nothing. We have done nothing as a

district.” Furthermore, when asked if there is anything he would want to do to prepare for literacy instruction, he answered, “No. That sounds terrible, but I haven’t done anything.” Principal C also pointed out that his district has not made literacy instruction in the content areas a focus for administrators, “I don’t know all that’s out there. Now, I’m not saying that it’s not needed, I’m just saying that it isn’t something we have concentrated on.” Principal D had to think about whether or not he has attended any professional development on literacy, but after a moment, he said, “For literacy. No. My master’s is in educational administration and my certificate is in the superintendency. They didn’t really require anything for literacy. So, nothing specifically I was required to do.”

Principals B and E elaborated on their prior professional development endeavors. Principal B has attended trainings at the Allegheny Intermediate Unit and through the Principals’ Academy, but he did not specifically attend a training on literacy standards or instruction. Furthermore, he commented that in his opinion administrators are professionally underdeveloped:

I think that’s my biggest problem with us being administrators: not being developed in any way, at least in my experiences here. Professional development, you’ve got to lead your leaders, and I don’t know our leaders are led in public education when it pertains to any professional development. We have this arbitrary process of this induction, new principal induction and other in-service types of ideas, but there’s never intense focus on things that are important like literacy. How do you lead the leader to lead literacy? I don’t think that has ever been discussed in my district or in any district. So I think that is something that needs to be done more.

Although he did not reference a specific training or prior preparation for literacy, Principal B recognized the necessity of his own professional development to lead the new literacy standards. He mentioned that his administrative team at the high school collaborates on implementing new programs, and he is confident that as the new standards take effect, he and his team will work together to move forward.

Principal E referenced fragmented professional development he has completed; yet he also commented on the importance of professional development for literacy instruction:

Me personally? Not much. Other than...you go to the IU or someone is putting on something and here is all the strategies and here is what teachers should be doing and you go for half a day and you bring that back and then you get caught up in what you have to do as an administrator, and then you have x-number of professional development days with teachers, which isn't enough, and then you say, we can keep people after but they want to be compensated for their time. So then time becomes a factor to how you can do that, to say, here's skills here's strategies we can do, but um, our next in-service day is in October, but we're doing School Performance Profile, or we're doing curriculum mapping, or we're doing...it's finding the time. But it's like anything else, it's important that you find the time.

Principal E mentioned that professional development on literacy instruction is important, but time and money limit his ability to make it a priority.

Across the interviews, all five principals echoed the same response: as high school principals, they have not participated in professional development to prepare them to lead the implementation of the new literacy standards. Most of the principals articulated that although literacy instruction is important, it is not the primary focus for personal professional growth. For

the secondary principals, other state mandates and initiatives take precedence over the implementation process of literacy across the content areas.

4.5.2 Professional Development for Literacy is Not a Focus

All of the principals stated that they have not structured a personal plan to develop their skills as an instructional leader to implement the new literacy standards. Some of them want to create a self-guided professional development plan, but they have not done so yet, while others have no intention to create such a plan. The reasons for their decisions vary from not feeling a sense of urgency to dealing with other state mandates.

Principal A's concern for professional development was not specific to literacy instruction; however, he did talk about the need to know more about the new PA Core standards. Throughout the interview he mentioned the district's involvement with various grant programs that tie them to specific professional development in which he has to participate. For example, his district is a Race to the Top grantee; therefore, his professional development as an administrator has centered on teacher effectiveness and the use of the Danielson framework to evaluate teacher performance.

Principal B has not planned any professional development on the literacy implementation process; however, he talked about what professional development he would want to help him implement the new literacy standards:

I would want something authentic. I would want something that would be authentic for children in any environment.... These have to be practices that are realistic. They have to be things that can be done in a 42-minute period when it comes to children. And it has

to be done in a reasonable way. And for me, that professional development needs to be more about when you go into how a lesson is structured, how instructional strategies are used, kind of like a cycle, I look at it as a big circle. You have to use some lecture, you have to use some grouping, and there has to be different ways you do things. And for me, a way for administrators to be on the same page, to promote that literacy to be able to say, you missed a piece here this is a piece you could have done a little different. Instead of going in with so many things to think about as it pertains to evaluation. You don't get a chance to focus in on...the piece on literacy...More tangible things that I can say, ok, I know that instructional strategy. It's called this, and here's a way you can use it. I know some, but I can definitely use to have more of my own library of what best practice would be. That would be an awesome way, an example of, a list of, defining some literacy strategies, a ways to assess kids.

His message is that he wants his professional development to be grounded in authentic application that he can use to conduct classroom observations and provide meaningful feedback to his teachers. Through the knowledge of viable resources and instructional practices, he believes he can help teachers implement the new literacy standards. Although he was able to articulate aspects of what he would want in a professional development plan, he has not established a plan.

Principals C and D stated that there is no sense of urgency to prepare for the implementation of the new literacy standards; however, their rationales for not having a heightened sense of needed awareness of the new standards differed tremendously. Principal C's students already score high on standards based assessments; therefore, in his district the

implementation of literacy standards in the content areas is not a focus. Principal D does not have plans to prepare because he believes:

...the Common Core is behind us now. We have it in our curriculum. Yeah, we're waiting to see if they are going to require it or not, but it changes...The expectations change so fast, that it's almost comical now, because we say now, why should I attend this because I don't even know if the project based assessments are going to be here next year or the Common Core is going to be here. Some of the decisions I make for where I go for my PD is based on what I deal with day to day rather than this is what's going to come, more like legal issues and probably public relations.

Principal D's focus is not on the literacy standards because he has little faith that there will be a mandatory implementation process for them. Furthermore, his professional development focus is on school law and other public relations pieces.

The lack of preparation to lead the new literacy standards was also illustrated in the principals' lack of awareness of available professional development opportunities available to them as secondary administrators. None of the principals mentioned any specific trainings or workshops they would like to attend solely for literacy instruction.

Although Principal A is in a KTO district for grades Pre-K-8, he had no knowledge of available professional development: "I can't believe webinars haven't happened, but they're not getting to me. I would go if PATTAN or the IU had something or our association had something, but I'll also dig in, when the time is right. It sounds like the time should be now, but with the pile I have, it's not there." Similarly, Principal C also stated that he doesn't "know all that's out there" when it comes to professional development on the implementation of literacy standards; however, his reasoning for not seeking further training substantially differs from

Principal A. Principal D also was unable to name a specific training or workshop he would like to attend; he referenced the fact that he has attended ASCD and National Association of Secondary School Principals (NASSP) workshops, but nothing specifically on literacy instruction.

Principal B's experience with past webinars and trainings offered at the Intermediate Unit has left him jaded. He remarked that he believes "webinars are a waste" because he "can't get engaged." Additionally, he perceives the Intermediate Unit trainings as "trying to generalize things for a large group of people," which he does not find relevant for the context in which he works. However, he did mention the Principals' Academy trainings as "good," because they pertain to instructional practice rather than theory or state mandates. Nonetheless, he did not mention specific trainings or workshops on literacy implementation across the curriculum.

Lastly, Principal E mentioned that his district invested in PD-360, which houses over 10,000 videos on professional development aligned to the Danielson framework for teacher evaluation. Although he believes the site has videos specific to literacy instruction, he was not certain, nor does he have immediate plans to investigate what resources are available for him via PD-360. Moreover, he has not collaborated with other administrators within his district to prepare for the transition to the new literacy standards, mostly because it "becomes a time issue."

4.6 SUMMARY OF DATA ANALYSIS AND FINDINGS

The data collected and analyzed from the KtO LLNA and the interviews with the five high school principals provided detailed information on Pennsylvania High Schools' capacity to implement a comprehensive literacy program. Although the KtO LLNA data and the interviews

with the principals suggest that secondary schools and the administrators that lead them value literacy instruction in the content areas, few schools and administrators are prepared to implement a comprehensive literacy plan to improve literacy instruction. Table 33 outlines the findings of the study.

Table 33. Summary of Findings

- | |
|--|
| <ul style="list-style-type: none">• Districts perceive that their curriculum is aligned to the PA Academic Standards• Literacy is a priority in most districts• Secondary literacy practices are not consistently implemented across the content areas• Few districts use assessment data to improve literacy instruction• Limited and poor-quality professional development is provided for teachers and principals• Administrators are not supported with established district literacy plan, resource, or professional development• Administrators need professional development in the following areas: knowledge of effective literacy instruction, knowledge of PA Core Standards for Literacy, and knowledge of processes for affecting cultural change• Administrators have not prioritized professional development for literacy instruction |
|--|

The majority of districts that completed the LLNA recognized that their PA Academic Standards aligned curriculum is a strength; however, strategies and actions within assessment, instruction, professional learning and practice, and literacy leadership, goals, and sustainability are not areas of strength to support a comprehensive literacy plan at the secondary level. Although the interviewed secondary principals had various definitions of content literacy and limited knowledge of the role in implementing literacy across the curriculum, they were able to identify areas of needed professional development to implement the new PA Core standards for literacy in the content areas. However, most secondary principals do not have self-created plans to develop the skills necessary to implement a comprehensive literacy plan to support the new standards, nor are they planning on developing one.

5.0 CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 OVERVIEW OF THE STUDY

With changes to state standards to include literacy instruction across the curriculum and the national reform movement to prepare students for college and the work place, this study addressed the current capacity of high schools and administrators to implement literacy across the secondary curriculum. Furthermore, it took a closer look at the professional development needs and plans of administrators to act as literacy leaders in their buildings. The study included a secondary analysis of ordinal data collected from 324 districts across Pennsylvania through the Keystones to Opportunity Local Literacy Needs Assessment, which districts completed on a voluntary basis to compete for grant money. The study also included guided conversations with five principals from Southwestern Pennsylvania to gather more detailed information on the professional development needs and plans of secondary principals to implement literacy standards across the curriculum. The data garnered from the study suggest that high schools do not have the necessary components of a comprehensive literacy plan in place to implement the new literacy standards. Additionally, high school principals perceived that they are inadequately prepared to lead the implementation process and they have limited plans to participate in professional learning opportunities to develop their knowledge of content literacy.

5.2 CONCLUSIONS

The study generated a depiction of the current state of literacy implementations at the secondary level and secondary principals' needs and plans to prepare for the new state standards. The following questions were addressed in this study:

1. What is the current capacity of secondary schools to implement components of a school-wide comprehensive literacy plan?
2. What are the perceived professional development needs of secondary principals to implement the Pennsylvania Core Standards for literacy in the content areas?
3. How are secondary principals preparing themselves and their schools to implement the Pennsylvania Core Standards for literacy in the content areas?

5.2.1 Research Question 1

The results of the KtO data suggest that most high schools in Pennsylvania are not prepared to implement a school-wide comprehensive literacy plan. They do not have the necessary components of curriculum, instruction, assessment, professional learning, or literacy leadership. However, most high school leaders in Pennsylvania perceive that their curriculum is aligned with the former PA Academic standards, but literacy instruction is not systemically or consistently being implemented across the subject areas. It should also be noted that the data do not imply or suggest that high schools anticipate a seamless transition from the PA Academic standards to the new PA Core standards for literacy across the content.

The Literacy Planning Teams that completed the LLNA recognized four areas of a comprehensive literacy plan that they either have in place or perceive to be an established

strength within their secondary schools. In the category of standards and curriculum, the majority of high schools have an established curriculum based on the former PA Academic Standards and the Pennsylvania Comprehensive Literacy Plan. Additionally, the LLNA identified that high school administrators support instruction through walkthrough observations to provide their teachers with feedback; however, the principals interviewed felt that they are not prepared to support literacy instruction by providing quality feedback to teachers based on their classroom observations. Lastly, school districts are increasingly prioritizing literacy and making financial resources available to support literacy at the high school level.

Although high school leaders are beginning to recognize the need for a comprehensive literacy program, most of the high schools in Pennsylvania do not have the necessary components of a plan in practice. In the area of assessment, the majority of high schools do not utilize data from assessments to inform instruction. The measurements of assessments used in data analysis are rarely aligned with the essential elements of literacy. Moreover, there is limited professional development on how to use assessment data as they relate to literacy instruction. High schools also do not have an established instructional model that addresses the elements of literacy, and literacy instruction is not promoted in grades 9-12, nor is time allotted for literacy instruction in the content areas. Additionally, the professional development provided to teachers is of little quality: it is not aligned to resources, it is not focused on literacy, and it is not differentiated. Lastly, the district-level leaders are not providing a coordinated literacy program that supports the professional development of building principals, nor do most districts make use of their local Intermediate Unit or regional PaTTAN office to support professional growth.

The results of the Local Literacy Needs Assessments indicated that high schools across Pennsylvania do not have the capacity to implement a comprehensive literacy plan, especially

with the demands of the PA Core Standards for literacy across the content areas. This poses a problem for secondary principals who are charged with the responsibility to implement new literacy standards across the content areas when they themselves are not adequately prepared to lead literacy instruction. Although many of the pieces of a district literacy plan come from district-level administration, the building principal is responsible for implementing building level changes. The analysis of the LLNA data illustrate that most high school principals are not adequately supported with established district literacy plans, data, resources, and or professional development to lead a change of this extent.

5.2.2 Research Question 2

The results of the KtO data and the qualitative data from the principal interviews suggest that secondary principals have many areas of needed professional development to implement the new PA Core standards for literacy across the curriculum. The LLNA data highlighted the lack of district provided professional development for building principals, and principals are in need of professional development to implement the new literacy standards across the curriculum. The principals would benefit from professional development on the components of effective literacy instruction to aid them in supporting teachers. Their education and past professional development did not provide them with the necessary information on secondary literacy or the principal's role in leading literacy at the building level. Overall, the principals identified that they need professional development to help them supervise and evaluate literacy instruction, to identify the nuances of the new PA Core Standards for literacy, to craft meaningful professional development for their teachers, and to positively affect change within their buildings.

Although they are confident in their ability to evaluate instructional practices, they are not confident in identifying or evaluating the use of specific elements of literacy instruction. All of the principals conduct regular walkthroughs and formal observations, and most of them referenced elements of Danielson's Framework for Teaching; however, they are not confident that they know what to look for during an observation to know whether or not the teacher is effectively integrating literacy instruction. Also, they acknowledged that having a greater awareness of strategies specific to content areas would aid them in providing quality feedback to their teachers.

All of the principals were aware of the new standards, but they have limited knowledge of specific elements of the new PA Core Standards for literacy. In fact, most of them were not able to identify how the new standards differ from the old standards. None of them mentioned the focus on text complexity or the unique strategies relevant to the various disciplinary texts in which students are exposed. The principals also had various understandings of the concept of content literacy; none of them were able to verbalize that content literacy is the level of reading and writing skills that learners need in an academic subject to learn information and think critically in order to comprehend and respond to ideas and texts used for instructional purposes (Shanahan & Shanahan, 2008; Moje, Dillon, & OBoren, 2000). In most cases, their definition included language about skill acquisition to prepare for the new Pennsylvania standards based assessment that measures student achievement, the Literature Keystone Exam.

High school principals also need support when it comes to providing teachers with professional development on literacy instruction. The principals identified that they do not have enough knowledge of content literacy instruction to lead professional development workshops, and that they would have to go through their own training or contract with other agencies to

provide the training. Additionally, principals identified that they have limited time to provide professional development on literacy instruction do to other local and state mandates and or initiatives.

The interviews also revealed that principals believe teachers are content driven and do not perceive themselves as responsible for teaching literacy skills in their content areas; therefore, changing the current culture of instruction at the high school level is an area in which the teachers and principals need professional development. The concept of getting “staff buy in” was frequently mentioned, and it was quickly followed up with the idea of the principals acquiring necessary knowledge of literacy instruction in order to lead the magnitude of change necessary to embed literacy standards across the secondary curriculum. All of the principals recognized that the change of instructional practices would have to be done through the teaching staff, which requires the teachers to have ownership in the process of the cultural change.

5.2.3 Research Question 3

Principals have not participated in any professional development for implementing the new literacy standards, nor do they have plans to participate in any professional development in the near future. They recognize the value of content literacy instruction embedded in the secondary curriculum, but they have other local and state mandated initiatives that seem to take precedence over content literacy. Also, they were forthcoming in their interview that they would not know where to begin to receive quality professional development. The qualitative data collected from five high school principals from Southwestern Pennsylvania suggest that unless their students are doing poorly on the state standards-based assessment for reading, literacy is not a focus in their respective districts.

5.2.4 Summary of Findings

Although secondary schools and principals recognize the need for improved literacy instruction in the content areas, the findings of the study suggest most secondary schools do not have the necessary components for a comprehensive literacy plan, nor are their building principals ready to implement the magnitude of change required to implement a literacy plan and the new standards. The districts' identified shortcomings in the area of secondary literacy and the principals identified professional development needs to lead the implementation process of the new literacy standards illustrate that most secondary schools in Pennsylvania are not prepared for the new PA Core Standards for literacy instruction in the content areas.

5.3 IMPLICATIONS FOR PRACTICE AND POLICY

High schools and secondary building principals are not adequately prepared to implement the new PA Core Standards for literacy across the content areas. Successful implementation of a school-wide comprehensive literacy plan requires that secondary schools have both instructional and infrastructural capacity to support teachers and students; however, these two foundational elements are not established in most high schools in Pennsylvania (Bean, 2004; Bean & Dagen, 2011; Biancarosa & Snow, 2006). An effective secondary program includes explicit literacy instruction, professional development frameworks, and administrators and teachers collectively supporting students in the development of literacy skills that enable them to construct and communicate knowledge across the content areas. Additionally, the new literacy standards emphasize the integration of more complex texts that require students to use a myriad of

comprehension and cognitive skills, as well as their knowledge of vocabulary to further their understanding of information (Beck, McKeown, & Kucan, 2002; Fang & Schleppegrell, 2010; O'Brien et al., 1995; Shanahan, 2009). Most high schools are not currently prepared to implement such expectations for their students as evidenced by the results of this study.

The fact that high schools and principals are not adequately prepared to implement new, rigorous literacy standards implies that practice and policy changes are necessary. Currently, two components of policy mandated by the Pennsylvania Department of Education are not aligned. The new PA Core Standards require schools to assess their current curriculum and make necessary changes to do more with literacy instruction in the content areas. Although this policy supports the implementation of a more thorough approach to literacy instruction at the secondary level, it is not aligned with the method in which schools' academic performance is assessed. The Keystone Exams, which currently measure students' content knowledge in Biology, Algebra, and Literature, are used to assess school performance—these tests are not specifically aligned with the new PA Core Standards; they are aligned with the Keystone anchors and eligible content. Therefore, a sense of urgency to improve the quality of literacy instruction through the new standards is absent from most schools. Policy surrounding secondary literacy standards and standards-based testing in Pennsylvania should be better aligned to support the goal of improving literacy instruction at the secondary level.

Districts do not have a comprehensive approach to literacy. Although districts have some pieces of the necessary components for a literacy plan, their approach is fragmented and potentially counterproductive. The Local Literacy Needs Assessment and the PaCLP serve as two resources districts can use to improve their current capacity to implement a comprehensive literacy plan. The specific components needed to embed and support literacy across the

secondary curriculum are identified in both resources. District-level administrators can use the resources to better prepare for the implementation of the new standards. Although many districts have limited financial and human resources, the creation of a comprehensive district literacy plan that includes a vertical articulation of literacy skills from grades K-12 could potentially align the district resources to more efficiently support teachers and students at all grade levels.

Additionally, secondary principals lack basic knowledge of content literacy instructional practices to lead the development of a comprehensive literacy plan to support the implementation of the new PA Core literacy standards. Improving literacy instruction in the content areas is a complex task and requires a coordinated effort supported by content teachers, administrators, and other support personnel (Bean, 2004; Bean & Dagen, 2011; Biancarosa & Snow, 2006). Administrators should maintain literacy at the forefront of decisions concerning personnel, budgets, professional development, curriculum, and supervision and evaluation. Additionally, they should have an active role in leading, supervising, and evaluating literacy instruction across the secondary content curriculum. However, that is currently not happening in most districts in Pennsylvania. Administrators need to broaden their own content-knowledge of effective literacy instruction to build capacity and a school culture that supports teachers and students. Teachers will need to better understand their role in teaching students how to read and write in the content area, which will require ongoing, job-embedded professional development (Bean & Dagen, 2011; Biancarosa & Snow, 2006; Jetton & Alexander, 2004; Moje et al., 2004). Additionally, administrators' content knowledge and ability to supervise and evaluate literacy instruction is necessary to support the comprehensive literacy plan (Stein & Nelson, 2003). Districts that are not supporting their administrators' capacity to implement the new literacy standards are prohibiting content literacy from being fully implemented into the secondary curriculum.

In an effort to support administrators, policy and practice at the state and district level should include more defined professional development opportunities that support administrators as they prepare to lead the implementation of new state mandates. The implementation of improved literacy instruction at the secondary level has been supported with a litany of research; however, little has been done to prepare principals to lead the reform movement. The effort and work completed by the multitude of panels and agencies to create a more comprehensive approach to literacy instruction at the secondary level could potentially be halted at the school door because principals are not adequately prepared to implement such changes. Policy surrounding the implementation of new standards and assessments should include measures of professional development to support principals while they implement the policies into practice. Principals are responsible for acting as change agents, and they need to be supported in this role.

It is expected that principals have the capacity to lead change. Although secondary principals seem to recognize the importance of literacy instruction, they are not aware of available professional development opportunities and they are not preparing themselves to supervise the implementation of the new literacy standards. The professional development needs of secondary principals vary based on their perceived knowledge of the following: effective secondary literacy instruction practices across the content areas, curriculum development for secondary literacy, new content literacy standards, and effective professional development for content teachers in literacy instruction. Effective secondary principals are not masters of all content areas, but they have an in-depth knowledge of strong instructional practices and are able to set the vision for the school, lead individual personnel, maintain a working knowledge of literacy instruction, and arrange professional development for the educators they lead, as well as themselves (Fullan, 2002, Bean & Dagen, 2011; Stein & Nelson, 2003). Beyond the importance

of implementing and supervising strong literacy instruction in secondary schools, principals are accountable for building capacity within their building to lead change and school improvement. Principals are the lead learners in the building, and they are charged with the responsibility of empowering the right people to implement systemic change (Elmore, 2000; Bean & Dagen, 2011; Fullan, 2002; Spillane, Halverson, & Diamond, 2000).

The current state of policy and practice surrounding professional development opportunities for principals should also be examined. Professional development for principals could include a multitude of comprehensive approaches that are supported by both practice and theory (Darling-Hammond et al., 2010). Effective professional development includes regular conferences and workshops that focus on curriculum and instruction and collaborative cohort visits, peer observations, study groups, and other activities that allow principals the opportunity to share experiences with fellow secondary administrators (Darling-Hammond et al., 2010). Additionally, the IRA (2010) suggests that principals complete coursework in reading and reading related areas, as well as continually read professional journals on the topic of literacy. Currently, principals are not fully aware of the limited professional development that is available for them to improve their knowledge of literacy instruction. This implies that policy makers and district leaders should revisit how professional development opportunities for leading instructional growth are advertised and encouraged among high school principals. Principal preparation for literacy instruction in the content areas could include coursework or learning opportunities that strengthen their understanding of the content knowledge and pedagogy necessary to successfully integrate literacy instruction in the content areas (Stein & Nelson, 2003). Therefore, topics may include elements of secondary literacy instruction, supervising and evaluating literacy instruction, and standards-based education.

5.4 RECOMMENDATIONS FOR SECONDARY PRINCIPALS' PROFESSIONAL DEVELOPMENT

There are professional development opportunities for secondary principals to prepare to lead the implementation process of the new literacy standards across the curriculum. They vary from free webinars to costly comprehensive professional development courses offered by universities. Principals' choice of professional development should focus on their needs and the needs of their schools, especially as related to the implementation of a comprehensive literacy plan in the high school. The examples of professional development for principals listed below are not all encompassing of available programs, and they are subject to change without much notice.

The Penn Literacy Network (PLN) is based in the Graduate School of Education at the University of Pennsylvania, and it provides on-site comprehensive professional development for both teachers and administrators in literacy preK-grade 12. The all-day workshops are aligned with the expectations of the Common Core State Standards and they allow for teams of teachers and administrators to develop their knowledge of effective reading and writing strategies to use in all content areas. Moreover, the coursework requires participants to immediately use the new strategies and information upon returning to work. The PLN also has a course strictly for administrators of secondary schools: PLN1: School Leaders-Leading to Positively Impact Student Literacy preK-12. The professional development allows school leaders time “to analyze, evaluate, and synthesize the most current information related to leadership, literacy instruction, and creating change to act as catalysts for organizational learning and the development of professional learning communities within their school districts” (University of Pennsylvania, 2013). Through this course:

School leaders learn approaches to help them establish literate school environments that are grounded in problem solving, critical thinking, and logical reasoning - concepts that are focused on state and national standards. They employ practical techniques that investigate and connect content in all subject areas to the real world. Administrators learn to foster professional learning communities that increase the intelligence of their organization. (University of Pennsylvania, 2013)

Through the practical application of the strategies and actions learned at the PLN, secondary principals would be able to promote a more comprehensive literacy plan in their high schools.

Another professional development option for secondary principals is the Pennsylvania Inspired Leadership Program (PIL), which is supported by PDE and local Intermediate Units across the state. This is another comprehensive professional development program that requires about 90 combined hours of class and outside work to develop the necessary skills of school administrators. Although the PIL has four courses to choose from, Course #2 Focusing and Teaching and Learning, has a direct unit titled “Leading for Excellence in Literacy,” which focuses on the administrator’s role in leading a comprehensive literacy plan.

Additionally, there are opportunities to participate in free professional development workshops via webinars. “Webinar Series: School Leadership for Common Core Standards and College and Career Readiness,” is presented by the College Board Advocacy & Policy Center and the National Association of Secondary School Principals. The six webinars focus on the principals’ role of implementing the Common Core State Standards. Four of the webinars focus on the following topics that principals interviewed in this study recognized as areas of needed improvement: changing school culture and climate, school leadership roles, school wide

instructional practices, and English Language Arts Standards. Additionally, ASCD hosts a site called “Get to the Core,” which is a Common Core Webinar Series that anyone can access for professional learning. The website also has links to the handouts referenced in the webinars.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

Based on the findings of this study, further research is suggested on how graduate programs prepare principals to lead the implementation of content literacy instruction across the curriculum. Information gleaned from a study of this nature would help educational organizations craft quality professional development for principals in the area of content literacy to support their teachers. More knowledge of what principals need coming out of principal preparation programs could help narrow the focus of professional development opportunities. Additionally, the information could be used to improve new principal induction programs in which administrators in Pennsylvania are required to participate.

Another important research study could evaluate the availability and quality of professional development opportunities for current principals as they attempt to lead the implementation of a comprehensive literacy plan in their high schools. Currently, there are a multitude of journals principals are able to access in an effort to increase their knowledge of content literacy and their role in supporting teachers while they embed literacy skills with content-specific information. Research on the availability and quality of webinars, conferences, workshops, and other opportunities that either the Intermediate Units, PATTAN or another educational agency is offering would give more insight into what professional development needs to be developed to support secondary administrators.

Furthermore, as states attempt to improve the quality of education through the adoption of the Common Core State Standards or standards based on the Common Core, an analysis of the transition from the former standards to the new standards for literacy instruction could elicit necessary information to aid state departments in their development of professional development for school leaders as they move from the PA Academic Standards to the new PA Core Standards for literacy instruction. It would be important to know how state departments of education are supporting school districts, administrators, and teachers through the implementation process of the new literacy standards. The analysis could include how high schools are making changes to their current curriculum, instruction, use of assessment, and professional development to implement literacy across the curriculum. The information gleaned from a research study of this nature could provide other districts and the state department of education with ideas they could use to generate their own seamless transition to new standards.

APPENDIX A

KTO LOCAL LITERACY NEEDS ASSESSMENT CRITERIA FOR EVALUATION

Component	Broad Strategies to Support Implementation of a Literacy Framework	Actions Recommended to Support the Implementation of a Literacy Framework
Standards and Curriculum	(A) The district’s written curriculum for Literacy – Birth-Grade 12 - is aligned with the Pennsylvania Early Learning Standards (birth-5), the Pennsylvania Academic Standards for Reading, Writing, Speaking and Listening (K-12) and with the Reading Assessment Anchors and Eligible Content (Grades 3-8 and 11). Essential goals and content are articulated by grade level and provide the basis to enable all students to gain the necessary skills of a “literate person in the twenty-first century” (CCSS, p. 3).	<p>1. The Pennsylvania State Academic Standards, the Pennsylvania Early Learning Standards, and the Pennsylvania Comprehensive Literacy Plan (PaCLP) are the foundation of the district’s written curriculum. This curriculum explicitly states what students need to</p> <p>4. Reading, writing, speaking and listening are systematically integrated throughout the day in all subject areas.</p>
Assessment	(A) District personnel provide leadership for literacy assessment.	1. A “data culture” exists throughout the district. This includes a system to support building administrators in the use of literacy assessment data in schools and to develop follow-up plans to adjust instruction as needed at the school, grade and student levels
	(B) The district selects literacy assessment measures that are valid and reliable and that provide information on the essential elements of literacy instruction (phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing).	2. Selected measures provide information on the essential elements of literacy instruction appropriate for each level or grade span and are explicitly linked to district and state literacy goals. Duplication of assessment measures is avoided.
	(C) The district has developed capacity to gather and use data.	<p>3. Ongoing training and support is provided to all staff who teach or supervise literacy programs in the following areas:</p> <ul style="list-style-type: none"> a) Assessments used by the district b) Data analysis c) Data Interpretation d) Data utilization

	(E) Formative and summative evaluations are incorporated at all grade spans.	1. Support for a district-wide formative assessment process is provided at each level. Necessary resources are dedicated to ensure each school has a viable plan for collecting ongoing progress monitoring data on students receiving interventions. District recommendations are established regarding the frequency of data collection for students at risk of reading difficulties.
	(F) Data are reviewed regularly by administrators and teachers, and instruction and support are adjusted accordingly across the district.	1. Districts support schools by ensuring that teachers are provided the time needed to conduct regularly scheduled data meetings using district protocols and procedures to: <ul style="list-style-type: none"> a) Review results of literacy performance assessments on an ongoing basis (e.g., every 2-4 weeks for students below benchmark levels and 3-5 times/year for those at/above benchmark level). b) Make necessary adjustments to literacy instruction programs as indicated by the data. Periodic school and district-level data summits are scheduled (part-day meetings of literacy leadership teams 3-5 times/year) for more comprehensive data review and planning purposes. 2. Based on the review of data, district leaders participate in literacy team meetings at the school level in order to assist with systems-level problem solving and identify possible professional development needs and district supports.
Instruction	(A) Literacy instruction is explicitly organized on a grade-appropriate basis around the essential elements of literacy including phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing	1. The district has established an instructional model that addresses all of the essential elements including phonemic awareness, phonics, fluency, vocabulary, comprehension, receptive and expressive language, and writing.
	(B) School administrators are strong instructional leaders and ongoing support is provided for this role.	1. School administrators are supported in conducting regularly-scheduled instructional walk-throughs to ensure that effective instruction is being provided to all students and programs are being implemented with fidelity. 3. School administrators are assisted in (a) providing structure and support for grade level and school level literacy team meetings and (b) participating in them directly or indirectly through briefings following the meetings.
	(C) The district provides sufficient instructional time in literacy for all students to learn.	1. A suggested minimum amount of literacy instruction is provided to all students as follows: <ul style="list-style-type: none"> • Grades 9-12: 2-4 hours of literacy-connected instruction and practice that takes place across the instructional areas. • School board policy has been considered to ensure that the need for sufficient instructional time in literacy is met.
	(G) Effective teacher delivery of robust reading instruction is promoted across the district.	1. District personnel work with building administrators to ensure that teachers across the district are incorporating features of effective delivery of literacy instruction.
Professional Learning and Practice	(A) The most strategic and productive use of professional learning resources are provided and aligned with Pennsylvania Educational Initiatives (IDEA, Title I, Title III, etc.)	1. Professional development efforts are aligned to leverage resources and ensure a cohesive plan that addresses the needs of all learners (i.e. students, teachers). This alignment is sustained and focused across years. 2. District professional development time (e.g., staff development days, late starts, early dismissals) is utilized strategically by focusing on content that will result in meeting district-reading goals and by sustaining that focus over time.
	(B) Professional learning meets standards for effective professional learning.	1. All professional learning reflects the characteristics of effective professional learning programs. Professional development is <ul style="list-style-type: none"> a) Focused on goals and guided by assessment data b) Ongoing c) Engaging and interactive d) Collaborative (including Professional Learning Communities) e) Job-embedded. 2. Application of the content to classroom instruction is stressed. Impact of professional learning on student and teacher learning is measured. Coaching, instructional supervision, ongoing teacher collaboration, peer-coaching, and related strategies are used for this purpose.

	<p>(C) Differentiated professional learning is provided for all staff that teach or supervise literacy.</p>	<p>1. Initial and ongoing in-class professional learning is provided specific to the literacy programs school personnel will be teaching:</p> <ul style="list-style-type: none"> a) Before the start of the year, teachers new to a building receive detailed preparation in the school’s literacy model, literacy assessments, and how to implement the materials they will be using. b) Periodically (at least once a year), returning teachers receive follow up guidance to enhance implementation of the core, supplemental, and intervention materials. c) Instructional specialists (Title I, special education, ELL and Gifted Education specialists) are included in literacy professional learning that classroom teachers receive. <p>2. Principals attend district and building-level professional learning sessions on literacy elements, materials and assessments. Scheduling conflicts with district leadership meetings are avoided on these dates. Additional professional learning is provided for principals on becoming instructional leaders at regular sessions throughout the school year.</p> <p>4. Teaching staff are provided with opportunities to collaborate, study, observe others, visit model demonstration sites, and make plans to improve instruction.</p> <p>6. The district is committed to integrating literacy across the instructional areas at the middle and high school levels. Professional development and ongoing in-class support necessary to make this happen are provided including subject-specific comprehension and vocabulary strategies.</p>
<p>Literacy Leadership, Goals, Sustainability</p>	<p>(A) Strong literacy leadership is provided at the district level.</p>	<p>2. Policies, personnel, budgets, training, and other operational resources are used as fiscal and administrative strategies to produce improved outcomes at the district and school levels.</p> <p>5. Literacy is kept “front and center” as a district priority. Positive results are acknowledged and consistently high-performing and high-growth schools are recognized.</p>
	<p>(B) Strong literacy leadership at all levels is supported by strong literacy leadership at the district level.</p>	<p>1. Coordination of literacy goals, assessment, instruction, and professional development at the school and district levels is emphasized.</p> <p>3. The literacy coordinator or district literacy leadership team (Birth-Grade 12) performs the functions of literacy coordination including</p> <ul style="list-style-type: none"> (a) Meeting regularly using a well-planned agenda and providing meeting notes/minutes in a timely manner. (b) Supporting building principals and reading/intervention specialists (c) Making regular walk-through visits to classrooms to see evidence-based and effective literacy instruction in action (d) Coordinating literacy data collection and analysis (e) Coordinating district-level professional development and data retreats in literacy. <p>5. The district provides leadership and regular meetings times for professional learning teams. The focus is on the following questions:</p> <ul style="list-style-type: none"> a. What do we want students to learn? b. How will we know when they have learned it? c. What will we do when they haven't learned it? <p>8. Supervision and ongoing support needed for principals to fulfill their roles as instructional leaders are provided by district personnel.</p>
	<p>(C) The district has built capacity from within to support effective literacy practices.</p>	<p>3. District uses their local Intermediate Unit to provide literacy professional learning to build district capacity.</p> <p>4. District uses their regional PaTTAN consultants to provide professional learning and to build district capacity.</p>
	<p>(D) District and school literacy planning is used to guide literacy improvement efforts.</p>	<p>3. Schools are expected to develop a School Literacy Plan that is aligned with the District Literacy Plan; it is used to guide literacy improvement.</p> <p>4. Schools use their plan to guide literacy improvement.</p>

APPENDIX B

E-MAIL CORRESPONDENCE TO PRINCIPALS

Dear Principal:

This e-mail is to ask for your participation in a research study to evaluate secondary principals' preparedness to implement the PA Common Core literacy framework across the secondary curriculum. The data collected from this study may be used to assist in the creation of more efficient and effective professional development programs to support the efforts of principals to increase adolescent reading achievement.

My name is Marguerite Imbarlina Sciulli, and I am currently an assistant principal at Hampton High School. I am working on a study to complete my doctoral dissertation at the University of Pittsburgh under the supervision of Dr. Cindy Tananis.

The interview should take about 45-minutes to complete, and it will be conducted during the summer months at your convenience. The results of the study will be analyzed and presented to the graduate faculty of the University of Pittsburgh in fulfillment of my doctoral work in the fall of 2013.

The risk associated with your participation in this study is minimal. The information you provide will be recorded anonymously; no subject identifiers or codes will be used to re-identify you. There will be no direct benefit to you for your participation in the study; however I hope that the information garnered from this study will advance the support measures of secondary principals to enact federal and state education mandates.

I would really appreciate your time in helping me with this study. I will contact you in the near future with the hope that we can schedule time to meet.

If you have any questions about this study, please contact me either by phone 412.492.6383 or via e-mail: Sciulli@ht-sd.org.

Thank you for your anticipated help with my study.

Sincerely,
Marguerite Imbarlina Sciulli

APPENDIX C

INTERVIEW QUESTIONS

1. As a principal, what do you think literacy instruction in the content areas should look like in a high school?
2. What has been your role in creating and implementing a literacy plan for your school?
3. If you transition to the new PA Common Core Standards for literacy in the content areas, where will the greatest changes have to be made for your school?
 - a. Does your **curriculum** address literacy instruction in the content areas? How?
 - b. Does the implementation of literacy instruction in the content areas have an impact on your **teaching schedules and staffing decisions**? How?
 - c. What, if any, **assessments** are used in your school to measure student literacy achievement in the content areas? How are the **data** collected and shared with the teachers, students, and community?
 - d. What **professional development** opportunities are available to your teachers and staff to strengthen the implementation of literacy instruction in the content areas? How are you supporting educators in your school as a result of the new literacy standards?
4. How prepared are you, as the building principal, to make these changes? In which areas do you feel most confident? In which areas do you need more training?
 - a. Supporting instructional practice across the curriculum

- b. Revising curriculum to include literacy standards
 - c. Developing professional development for content teachers
 - d. Supervising and evaluating literacy instruction
 - e. Leading a change initiative of this magnitude
5. As a principal, what professional development have you personally completed to prepare for the implementation of the new literacy standards? What plans do you have to further your preparation?
- a. What trainings (IU, Webinars, etc.) have you attended? Elaborate on which trainings you found to be beneficial and why.
 - b. What coursework have you completed (university, PLN, etc.)?
 - c. How have you collaborated with other professionals (in district/out of district)?
 - d. What do you read (Journals, Books, Online Briefs) to keep current with content literacy instruction and the new standards? How has it influenced your practice?

BIBLIOGRAPHY

- Achieve, College Summit, National Association of Secondary Principals, & National Association of Elementary School Principals. (2013). Implementing the common core state standards: The role of the secondary school leader. Retrieved from http://www.achieve.org/files/RevisedSecondaryActionBrief_Final_Feb.pdf
- Adams, M.J. (2011). Advancing our students' language and literacy: The challenge of complex texts. *American Educator*, 34(4), 3-11, 53. Retrieved from www.aft.org/pdfs/americaneducator/winter1011/Adams.pdf
- Alexander, P.A. and Fox, E. (2011). Adolescents as readers. In M.L. Kamil, P.D. Pearson, P.D., E.B. Moje, and P. Afflerbach (Eds.), *Handbook of reading research* (Vol. 4, pp. 480-513). New York, NY: Routledge.
- Alvermann, D.E. (2002). Effective literacy instruction for adolescents. *Journal of Literacy Research*, 34(2), 189-208. doi: 10.1207/s15548430jlr3402_4
- Anders, P.L., & Clift, R.T. (2011). Adolescent language, literacy, and learning: Implications for a school-wide literacy program. In R.M. Bean and A.S. Dagen (Eds.), *Best practices of literacy leaders: Keys to school improvement* (pp. 162-183). New York, NY: Guilford Press. Retrieve from <https://sremote.pitt.edu/lib/pitt/,DanaInfo=site.ebrary.com+docDetail.action?docID=10505817>

- Anders, P.L., Hoffman, J.V., & Duffy, G.G. (2000). Teaching teachers to teach reading: Paradigm shifts, persistent problems and challenges. In M.Kamil, P. Mosenthal, D. Pearson, & R Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 719-742). Mahwah, NJ: Lawrence Erlbaum.
- Baker, L. & Carter-Beall, L. (2009). Metacognitive processes and reading comprehension. In Israel, S.E. and Duffy, G.G. (Eds.), *Handbook of Research on Reading Comprehension* (pp. 373-388). New York, New York: Routledge.
- Bean, R.M. (2004). *The reading specialist*. New York: Guilford Press.
- Bean, R.M. & Dagen, A.S. (2011). Schools as places of learning: The powerful role of literacy leaders. In Bean R.M. & Swan-Dagen, A. (Eds.), *Best practices of literacy leaders: Keys to school improvement* (pp. 103-123). New York, NY: Guilford Press. Retrieved from <https://sremote.pitt.edu/lib/pitt/DanaInfo=site.ebrary.com+docDetail.action?docID=10505817>
- Bean, T.W. & Harper, H.J. (2004). Teacher education and adolescent literacy. In T.L. Jetton & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 392-411). New York, NY: Guilford Press.
- Beck, I.L, McKeown, M.G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: The Guildford Press.
- Berman, I., & Biancarosa, G. (2005). Reading to achieve: A governor's guide to adolescent literacy. Washington, DC: National Governors Association Center for Best Practices. Retrieved October 12, 2012 from <http://carnegie.org/publications/search-publications/pub/209/>

- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139-148. Retrieved January 30, 2013 from <http://www.pdkintl.org/kappan/kbla9810.htm>
- Biancarosa, G. & Snow, C.E. (2006). Reading next: A vision for action and research in middle and high school literacy. Washington, D.C.: Alliance for Excellent Education. Retrieved February 2, 2012 from <http://www.all4ed.org/files/ReadingNext.pdf>
- Bichsel, J.A. (2008). *Professional development needs and experiences of secondary principals in southwestern Pennsylvania* (Doctoral dissertation). Retrieved from pitt.summon.serialsolutions.com
- Brumley, C. (2010). Situating literacy leadership within the ISLLC standards fro education administration. *Scholar-Practitioner Quarterly*, 4(3), 207-218.
- College Board, The. (2011). 2011 College-bound seniors: Total group profile report. New York, NY: The College Board. Retrieved from <http://research.collegeboard.org/data>
- Commonwealth of Pennsylvania. (2013). PA common core standards. Retrieved from <http://www.pdesas.org/standard/CommonCore>
- Conley, D. T. (2007). Toward a more comprehensive conception of college readiness. Eugene, OR: Educational Policy Improvement Center.
- Cotton, K. (2003). *Principals and student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Council of Chief State School Officers. (2013). *Common core state standards: Implementation tools and resources*. Retrieved from www.ccsso.org/documents/2012/common_core_resources.pdf
- Charmaz, K. (2005). Grounded theory in the 21st century: Applications for advancing social

- justice studies. In N.K. Denzin & Y.S. Lincoln, *The Sage handbook of qualitative research* (3rd ed., pp. 507-536). Thousand Oaks, CA: Sage.
- Creswell, J.W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Darling-Hammond, L. & Bransford, J. (2005). *Preparing teachers for a changing world*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., Meyerson, D., LaPointe, M., Orr, M.T. (2010). *Preparing principals for a changing world: Lessons from effective school leadership programs*. San Francisco, CA: Jossey-Bass.
- Desimone, L.M., Porter, A.C., Garet, M.S., Yoon, K.S., & Birman, B.F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112. Retrieved from <http://www.jstor.org/stable/3594138>
- Dillon, D.R., O'Brien, D.G., Sato, M., & Kelly, C.M. (2011). Professional development and teacher education for reading instruction. In M.L. Kamil, P.D. Pearson, E.B. Moje, and P.P. Afflerbach (Eds.), *Handbook of Reading Research* (Volume IV, pp. 656-687). New, NY: Routledge. Retrieved from <http://site.ebrary.com/id/10433361>
- Dole, J.A., Nokes, J.D., & Dritis, D. (2009). Cognitive strategy instruction. In Israel, S.E. and Duffy, G.G. (Eds.), *Handbook of Research on Reading Comprehension* (pp. 347-372). New York, NY: Routledge.
- Elmore, R. (2000). *Building a new structure for school leadership*. Washington, DC: The Albert Shanker Institute.

- Fang, Z., & Schleppegrell, M.J. (2008). *Reading in Secondary content areas*. Ann Arbor, MI: The University of Michigan Press.
- Fang, Z., & Schleppegrell, M.J. (2010). Disciplinary literacies across content areas: Supporting secondary reading through functional language analysis. *Journal of Adolescents & Adult Literacy*, 53(7), 587-597.
- Ferguson, R. F. (1991). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation*, 28 (Summer), 465-98.
- Foley, R.M. (2001). Professional development needs of secondary principals of collaborative-based service delivery modes. *High School Journal*, 85(1), 10-14. Retrieved from <http://web.ebscohost.com>
- Fullan, M. (2002). The change. *Educational Leadership*, 59(8), 16-20.
- Garner, R. (1987). *Metacognition and Reading Comprehension*. Norwood, NJ: Ablex Pub. Corp.
- Glaser, B.G. (1992). *Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.
- Greenleaf, C., & Petrosino, A. (2009). Response to Slavin, Cheung, Groff, and Lake (2008): Effective reading programs for middle and high schools: A best-evidence synthesis. *Reading Research Quarterly*, 44(4), 349-354. Retrieved from <http://www.jstor.org>
- Grossman, P., Schoenfeld, A., & Lee, C. (2005). Teaching subject matter. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 358-389). San Francisco, CA: Jossey-Bass.
- Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M., & Zeichner, K. (2005). How teachers learn and develop. In L. Darling-

- Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 358-389). San Francisco, CA: Jossey-Bass.
- Haynes, M. (2011). Engineering solutions to the national crisis in literacy: How to make good on the promise of the common core standards. Washington, D.C.: Alliance for Excellent Education. Retrieved from <http://www.all4ed.org/files/EngineeringSolutionsLiteracy.pdf>
- Hess, F.M., & Kelly, A.P. (2005). Learning to lead? What gets taught in principal preparation programs. Cambridge, MA: Program on Education Policy and Governance at Harvard University. Retrieved February 2, 2012 from http://www.aei.org/files/2005/05/02/20050517_Learning_to_Lead.pdf.
- Hornig, E., & Loeb, S. (2010). New thinking about instructional leadership. *Phi Delta Kappan*, 92(3), 66-69.
- Hynd-Shanahan, C. & Shanahan, T. (2008). Content-area reading/learning: Flexibility in knowledge acquisition. In Cartwright, K.B. (Ed.), *Literacy Processes: Cognitive flexibility in learning and teaching*, (pp. 208-233). New York, NY: Guilford Press.
- International Reading Association. (2010). Standards for reading professionals—revised 2010. Newark, DE: Author.
- International Reading Association Common Core State Standards (CCSS) Committee. (2012). *Literacy implementation guidance for the ELA Common Core State Standards* [White paper]. Retrieved from http://www.reading.org/Libraries/association-documents/ira_ccss_guidelines.pdf
- Irvin, J.L, Meltzer, J., & Dukes, M. (2007). *Taking action on adolescent literacy: An implementation guide for school leaders*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Jacobs, V. A. (2008). Adolescent literacy: putting the crisis in context. *Harvard Educational Review*, 78(1), 7-39. Retrieved from www.harvardeducationalreview.org
- Jenkins, J., & Pfeifer, R.S. (2012). The principal as curriculum leader. *Principal Leadership*, 12(5), 30-34.
- Jennings, J. (2012). Reflections on a half-century of school reform: Why have we fallen short and where do we go from here? Washington, DC: Center on Education Policy.
- Jetton, T.L. & Alexander, P.A. (2004). Domains, teaching, and literacy. In T.L. Jetton & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 15-39). New York, NY: Guilford Press.
- Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc>
- Kiecolt, K.J. & Nathan, L.E. (1985). *Secondary analysis of data*. Beverly Hills, CA: Sage.
- Kulik, J.A. (2003). *Effects of using instructional technology in elementary and secondary schools: What controlled evaluation studies say. Final Report* (SRI Project No. P10446.001). Arlington, VA: SRI International.
- Leinhardt, G. (1992). What research on learning tells us about teaching. *Educational Leadership*, 49(7), 20-25. Retrieved from <http://www.jstor.org/stable/3233783>
- Leinhardt, G., & Young, K. (1996). Two texts, three readers: Distance and expertise in reading history. *Cognition and Instruction*, 14(4) 441-486

- Marchand-Martella, N.E., Martella, R.C., Modderman, S.L., Peterson, H.M., & Pan, S. (2013). Key areas of effective adolescent literacy programs. *Education & Treatment of Children, 36(1)*, 161-184. Retrieved from <http://search.ebscohost.com/>
- McConachie, S.M. & Apodaca, R.E. (2010). Embedding disciplinary literacy: Leadership and professional learning. In S.M. McConachie & A.R. Petrosky (Eds.), *Content Matters* (pp. 163-196). San Francisco, CA: Jossey-Bass.
- McConachie, S.M. & A.R. Petrosky (2010). *Content matters*. San Francisco, CA: Jossey-Bass.
- Mertens, D.M. 2010. *Research and evaluation in education and psychology* (3rd ed.). Los Angeles, CA: Sage.
- Moje, E.B. (1996). "I teach students, not subjects": Teacher-student relationships as contexts for secondary literacy. *Reading Research Quarterly, 31(2)*, 172-195.
- Moje, E. B. (2008). Foregrounding the disciplines in secondary literacy teaching and learning: A call for change. *Journal of Adolescent and Adult Literacy, 52(2)*, 96-107.
- Moje, E. B., Ciechanowski, K. M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly, 39(1)*, 38-70.
- Moje, E. B., Dillon, D. R., & O'Brien, D. (2000). Reexamining roles of learner, text, and context in secondary literacy. *The Journal of Educational Research, 93(3)*, 165-180.
- Moore, D.W., Bean, T.W., Birdyshaw, D., & Rycik, J.A. (1999). Adolescent literacy: A position statement. Newark, DE: International Reading Association. Retrieved from www.reading.org/downloads/positions/ps1036_adolescent.pdf
- Nagy, W.E. & Anderson, R.C. (1984). How many words are there in printed school English? *Reading Research Quarterly, 19(30)*, 304-330.

- Nagy, W.E., Herman, P.A., & Anderson, R.C. (1985). Learning words from context. *Reading Research Quarterly*, 20(2), 233-253.
- National Association of Elementary School Principals. (2001). *Leading learning communities: Standards for what principals should know and be able to do*. Alexandria, VA: National Association of Elementary School Principals.
- National Governors Association Center for Best Practices, & Council of Chief State School Officers. (2010a). Common Core Standards English Language Arts Appendix A. Washington, DC: Authors. Retrieved from www.corestandards.org
- National Governors Association Center for Best Practices, & Council of Chief State School Officers. (2010b). Common Core Standards English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects. Washington, DC: Authors. Retrieved from www.corestandards.org
- National Survey of Student Engagement. (2003). Converting data into action: Expanding the boundaries of institutional improvement. Retrieved from http://www.indiana.edu/~nsse/2003_annual_report/index.htm
- National Survey of Student Engagement. (2004). Student engagement: Pathways to student success. Retrieved from http://www.indiana.edu/~nsse/2003_annual_report/index.htm
- National Survey of Student Engagement. (2006). Engaged learning: Fostering success for all students. Bloomington, IN: Author.
- O'Brien, D.G., Moje, E.B., & Stewart, R.A. (2001). Exploring the context of secondary literacy: Literacy in people's everyday school lives. In E. Moje & D. O'Brien (Eds.), *Constructions of literacy: Studies of teaching and learning in and out of secondary schools* (pp. 27-48). Mahwah, NJ: Lawrence Erlbaum.

- O'Brien, D. G., Stewart, R. A., & Moje, E. B. (1995). Why Content Literacy Is Difficult to Infuse into the Secondary School: Complexities of Curriculum, Pedagogy, and School Culture. *Reading Research Quarterly*, 30(3), 442-463. Retrieved from <http://www.jstor.org/stable/747625>
- Patton, M.Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- PA Department of Education. (2011a). *Keystones to Opportunity: Local Literacy Needs Assessment*. Harrisburg, PA: Author.
- PA Department of Education. (2011b). *Keystones to Opportunity: Pennsylvania's Vision for Sustainable Growth in Reading Achievement*. Harrisburg, PA: Author.
- PA Department of Education. (2012a). *The Pennsylvania Comprehensive Literacy Plan*. Harrisburg, PA: Author.
- PA Department of Education. (2012b). *PA Common Core Standards*. Harrisburg, PA: Author.
- PA Department of Education. (2013). *Keystones to Opportunity: Pennsylvania's Vision for Sustainable Growth in Reading Achievement PAIUU CC Update*. Harrisburg, PA: Author.
- Porche, M.V., Pallante, D.H., & Snow, C.E. (2012). Professional development for reading achievement: Results from the collaborative language and literacy instruction project (CLLIP). *Elementary School Journal*, 112(4), 649-671. Retrieved from www.eric.ed.gov.opac.acc.msmc.edu
- Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). *Common core standards: The new U.S.*

intended curriculum. *Educational Researcher*, 40(3), 103-116. doi:
10.3102/0013189X11405038

Romine, B. McKenna, M., & Robinson, R. (1996). Reading coursework requirements for middle and high school content area teachers: A U.S. survey. *Journal of Adolescent and Adult Literacy*, 40, 194-198.

Rubin, H.J. & Rubin, I.S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.

Sailors, M. (2009). Improving comprehension instruction through quality professional development. In S.E. Israel & G.G. Duffy (Eds.), *Handbook of Research on Reading Comprehension* (pp. 645-657). New York, NY: Routledge.

Scholastic Research and Evaluation. (2006). *Compendium of READ 180 research*. New York: Scholastic. Available online at
http://teacher.scholastic.com/products/research/pdfs/Compendium_EE_6_26_06.pdf

Shanahan, C. (2009). Disciplinary comprehension. In Israel, S.E. and Duffy, G.G. (Eds.), *Handbook of Research on Reading Comprehension* (pp. 240-260). New York, NY: Routledge.

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78(1), 40-59.

Slavin, R.E., Cheung, A. Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best-evidence synthesis. *Reading Research Quarterly*, 43(3), 290-322. Retrieved from <http://www.jstor.org/stable/20068345>

Somers, M.A., Corrin, W., Sepanik, S., Salinger, T., Levin, J., Zmach, C., & Wong, E. (2011).

The enhanced reading opportunities final report: The impact of supplemental literacy courses for ninth-grade readers executive summary (NCEE 2010-4022). Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Spillane, J., Halverson, R., & Diamond, J. (2000). *Toward a theory of leadership practice: A distributed perspective*. Evanston, IL: Institute for Policy Research.

Standards for Success. (2003). An introduction to work samples and their uses. Eugene, OR: Center for Educational Policy Research, University of Oregon.

Stein, M.K., & Nelson, B.S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448. Retrieved from <http://www.jstor.org/stable/3699585>

Sturtevant, E.G. (2003). The literacy coach: A key to improving teaching and learning in secondary schools. Retrieved from http://www.all4ed.org/publication_material/reports/literacy_coach

Thibodeau, G.M. (2008). A content literacy collaborative study group: High school teachers take charge of their professional learning. *Journal of Adolescent & Adult Literacy*, 52(1), 54-64.

Torgesen, J. K., Houston, D. D., Rissman, L. M., Decker,

S. M., Roberts, G., V

Wexler, J. Francis, D. J., Rivera, M. O., & Lesaux, N. (2007). Academic literacy instruction for adolescents: A guidance document from the Center on Instruction. Portsmouth, NH: RMC Research Corporation, Center on Instruction.

Trzesniewski, K.H., Donnellan, M.B., & Lucas, R.E., Eds. (2011). *Secondary data analysis: An*

introduction for psychologists. Washington, DC: American Psychological Association.

Tschannen-Moran, M., Uline, C., Hoy, A. W., & Mackley, T. (2000). Creating smarter schools through collaboration. *Journal of Educational Administration*, 38(3), 247-272.

Retrieved from <http://dx.doi.org/10.1108/09578230010342312>

The University of Pennsylvania Graduate School of Education. (2013). Evidenced-Based Literacy Instruction. Philadelphia, PA: Penn GSE, Penn Literacy Network.

U.S. Department of Education. (2005). Reading first notebook: What is instructional leadership and why is it so important? Austin, TX: Southwest Educational Development Laboratory.

U.S. Department of Education. (2009). NAEP 2008: Trends in academic progress in reading and mathematics. Washington, DC: National Center for Education Statistics.

U.S. Department of Education. (2011). The nation's report card: Reading 2011(NCES 2012-457). Washington, D.C.: Government Printing Office.

U.S. Department of Education. (2012). Summary of 2009 striving readers project: Implementation and evaluation of targeted interventions for struggling readers after one year. Washington, D.C.: Government Printing Office.

U.S. Department of Education. (2013). Striving Readers Comprehensive Literacy Program. Washington D.C.: Author.

Walpole, S. & McKenna, M.C. (2011). Principals as literacy leaders. In Bean R.M. & Swan-Dagen, A. (Eds.), *Best practices of literacy leaders: Keys to school improvement* (pp. 103-123). New York, NY: Guilford Press. Retrieved from <https://sremote.pitt.edu/lib/pitt/,DanaInfo=site.ebrary.com+docDetail.action?docID=1050>

5817

- Waters, T., Marzano, R.J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-Continent Research for Education and Learning.
- Wiggins, G.P., & McTighe, J. (2006). *Understanding by design (2th ed.)*. Upper Saddle River, NJ: Pearson Education, Inc.
- Wilson, N.S., Grisham, D.L., & Smetana, L. (2009). Investigating content area teachers' understanding of a content literacy framework: A yearlong professional development initiative. *Journal of Adolescent & Adult Literacy*, 52(8), 708-718. doi: 10.1598/JAAL.52.8.6