

EMPOWERING SCHOOL LIBRARIANS TO BE
LITERACY INSTRUCTION LEADERS
THROUGH PROFESSIONAL DEVELOPMENT

by

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A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
in Literacy Studies

Middle Tennessee State University
December 2017

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This work is dedicated to my husband Matt, and our children Emily and Andrew. Your love and encouragement throughout this effort made it not only possible, but also meaningful. In you three, I have been blessed beyond measure.

ACKNOWLEDGEMENTS

I wish to acknowledge the many people who made the completion of my dissertation possible. I would first like to thank my dissertation committee for their time and commitment to my work. In serving as my committee chair, Dr. Eric Oslund was a steadfast and knowledgeable guide, providing clarity and encouragement at many key steps. Dr. Amy Elleman vastly expanded my school librarian's mindset regarding literacy, and helped me to later bring these ideas to fruition. Dr. Terri Tharp had extraordinary intuition to know just when to check in on me, whether it was to answer my qualitative research questions or offer moral support. And Dr. Charles Milligan offered me his valuable perspective as a former high school administrator; his ideas shaped the entire direction of this study. Each of you offered diverse and extremely important viewpoints, but were also all-around collegial and warm individuals to work with; I admire and appreciate you all.

In addition to my committee, several other individuals at Middle Tennessee State University offered me valuable support during my dissertation. Dr. Jwa Kim gave me very helpful feedback regarding my study's methodology. Dr. Jason Martin scored my qualitative data for reliability. Ms. Bonnie Allen, Dean of Walker Library, generously provided funding and support for my studies, including supplemental funding to support the dissertation's study. The dean of MTSU's College of Education, Dr. Lana Seivers, also stepped in to provide financial support for the dissertation's study. I am grateful to each of you.

Completing this doctoral program was only possible due to the love and support of my family. My parents, James K. and Donna Nourse, made education a priority from an early age, and inspired me to aim high. My sister Kelly gave me much-needed pep talks throughout my studies, but also made me laugh when I needed it most. My mother's parents, James D. and Ethel Roop, kept their home filled with books and set an example of lifelong learning. My father's parents, James A. and Maggie Nourse, provided strong examples of determination and self-reliance which have guided me throughout my life. My in-laws, Hugh and Betty Reed, provided continual encouragement and praise. Although I am blessed with a large and supportive extended family, I would single out my uncle Dr. A. Kevin Nourse who was the first in my family to complete his Ph.D., and therefore was my good example and mentor.

Getting to this point in my educational journey was absolutely predicated on the best decision I ever made in my life: namely to introduce myself to the man who would later become my husband. Meeting in 1992 as college freshmen, Matt and I later graduated and began a life together; he did not know at that time that this would involve him supporting me through numerous degrees. Matt did it all with unwavering encouragement and infinite graciousness. He, along with our children Emily and Andrew, fill me with the love and strength to want to do the best I can at whatever I attempt.

ABSTRACT

Federal education policy has long emphasized the importance of literacy in student academic success, and the most recent policy example of this literacy priority has been the Every Student Succeeds Act (ESSA) of 2015. ESSA is noteworthy for its explicit designation of school librarians as being members of the literacy instruction team. With this increased role for collaboration with reading specialists and classroom teachers comes the responsibility of heightened attention to reading instruction as part of the school librarian workload. Despite federal and professional mandates stipulating literacy instruction, many school librarians do not see this role as a priority within the scope of their other duties. This study sought to improve school librarian knowledge and perceptions of their literacy instruction role through a professional development series emphasizing reading comprehension strategies.

The researcher conducted a six-week long professional development (PD) course emphasizing reading comprehension strategies. Thirty-five school librarians currently working in Tennessee K-12 schools were selected through an application process to receive instructional content. Participants for the study were recruited from this group of PD participants.

The study called for a convergent mixed methods research methodology. Participants were assessed through both quantitative and qualitative means to

derive any change in their knowledge and perceptions regarding the literacy instructional role of the school librarian.

Analysis examined class-wide participant changes to knowledge and perceptions as a result of the instruction, as well as possible group differences between elementary and secondary school librarians. The study determined that statistically significant gains were made in both knowledge and perceptions on average, but that group differences in the two constructs were not present at a quantitative level. At a qualitative level, a larger number of secondary cohort members displayed a change regarding their perceptions of the literacy instructional role. In summary, the study demonstrated that the experience of receiving instruction on reading comprehension instructional strategies positively impacted participant knowledge as well as perceptions of the school librarian's literacy instructional role.

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LIST OF ABBREVIATIONS

AASL:	American Association of School Librarians
ALA:	American Library Association
CCSS:	Common Core State Standards
ELA:	English Language Arts
ESSA:	Every Student Succeeds Act
LIS:	Library and Information Studies (university program)
MLS:	Master of Library Science (degree)
NCLB:	No Child Left Behind Act
NRP:	National Reading Panel
PD:	Professional Development
Rtl:	Response to Intervention

CHAPTER I

INTRODUCTION

Background of the Study

This study aimed to investigate the effect of literacy instruction training on the knowledge and perceptions of a selected group of K-12 school librarians. Many researchers have demonstrated the importance of school librarian instruction to student achievement (Kachel & Lance, 2013; Lance, Rodney, & Schwarz, 2010; Mardis, 2007; Small, Shanahan, & Stasak, 2010), however little research has examined the specific role of the school librarian in reinforcing student understanding of literacy concepts. This subject is very timely, as the Every Student Succeeds Act (ESSA) legislation passed in December 2015 placed renewed focus on the importance of student literacy achievement.

Although many sections of the ESSA legislation reference the literacy role of school libraries, it is perhaps ESSA's inclusion of school librarians on the "literacy instruction team" that is most significant. Section 2224 of the ESSA legislation mandates professional development funding as well as collaborative planning time for the school-based literacy instruction team, and specifies the composition of this group as including classroom teachers and the school librarian (USGPO, 2015).

In considering the implementation of literacy instruction teams under ESSA, an obvious question to ask might be: on which area of literacy should the teams focus? Although precise instructional goals will vary based on student

population and school targets, reading comprehension should always be a priority. Reading comprehension is very important to academic success, as comprehension is a complicated mental process necessary for nearly all higher-order reasoning. Learning activities such as problem-solving and decision-making rely on one's comprehension ability (McNamara & Magliano, 2009).

Learning to read is a very complex undertaking, and much research has been conducted to deconstruct the literacy acquisition process into a system of discrete instructional tasks. The National Reading Panel, a federal initiative launched in 1997, analyzed the existing body of reading research at the time in order to reach some consensus as to the most successful evidence-based reading instruction practices. Their conclusions, reported in 2000, were that reading instruction should target the areas of phonemic awareness, phonics, fluency, and reading comprehension with explicit instruction (NICHD, n.d). Although the first three skills are vital to literacy, they are acquired primarily in the early years of elementary school. Reading comprehension, by comparison, is a literacy skill that requires reinforcement at both the elementary and secondary school levels.

Tennessee has made reading proficiency a priority through its introduction of several instructional measures; they are an attempt to remedy a literacy deficiency in which fewer than half of third and fourth grade students in the state are currently reading at grade level (TDOE, 2017a). These measures include the Read to be Ready program as well as Response to Intervention (RtI). Read to be Ready is a 3-year program whereby K-3 classroom teachers will be coached and

instructed on literacy instruction strategies for the classroom (TDOE, 2017b). Rtl, which is one component of Read to be Ready, is a more comprehensive K-12 classroom strategy of tiered instruction and intervention. Literacy is one of several skills for which students may receive a Rtl instructional plan. Through initiatives such as Read to be Ready and Rtl, the state of Tennessee hopes to achieve a stated goal of 75% of students reading on grade level by 2025 (TDOE, 2016). To reach such an ambitious goal, knowledge of reading instruction and collaboration between all instructional personnel in the school (school librarians, administrators, classroom teachers, reading specialists, and paraprofessionals) is essential.

Statement of the Problem and Purpose

As a school-wide resource, librarians have a special opportunity to work with all members of the instructional staff. Various federal educational standards as well as school librarian professional standards mandate a collaborative instructional environment in which librarians contribute to literacy instruction through reading comprehension strategy instruction. There unfortunately appears to be a disconnect between mandate and practice, however, as research on librarian professional dispositions and skills indicates that reading comprehension instruction has taken a backseat to the many other duties of librarianship (Asselin, 2003; Cart, 2007; Everhart, 2013; Will, 2016).

There are a variety of interconnected reasons for this plight, the first of which is a lack of school librarian course offerings in reading comprehension

strategies. This deficiency exists within both their university preparation programs as well as on the job. No graduate-level preparation program in Tennessee currently requires a course in literacy instruction, and only two programs were found to even offer such a class as an elective. Once on the job, librarians often encounter a work environment in which they are excluded from professional development opportunities with classroom teachers (Small & Stewart, 2013); therefore it is unlikely that librarians will receive literacy training through their employers.

The frequency by which school librarians are found to instruct on literacy strategies is also limited due to the perceptions of some librarians that this instructional focus is not a priority in the scope of their other job duties. Many librarians concentrate on teaching their students “information literacy”, a broad term encompassing research skills and technology proficiency (Will, 2016). Research indicates that the instruction role is approached differently between elementary and secondary school librarians, with secondary school librarians placing a lower priority on their role as a teacher (Lea, 2013; McCoy, 2001; McCracken, 2001). Other librarians see their literacy role as confined to student reading motivation, including collection development of engaging reading material (Asselin, 2003; Cart, 2007; Everhart, 2013).

Although this traditional role of school librarians is a powerful and appreciated facet of literacy instruction, it is no longer enough. School librarians need to assume their mandated position within the literacy instruction team, and so the problems of literacy instruction knowledge and perceptions must be

addressed. Professional development may provide a solution to these problems as well as other barriers to literacy leadership.

The purpose of this study was to determine if a structured instructional intervention emphasizing reading comprehension techniques would have an effect on librarian knowledge and/or their perceptions of their literacy instruction role, and if differences existed by instructional grade level.

Significance of the Study

Data collected during this study may help researchers, including educational policy makers, who are studying the importance of literacy training for school librarians. Partnerships between universities and local K-12 school systems can provide much-needed professional development targeted specifically to school librarians, a group which often lacks specially designed PD. This study could also provide a framework for other universities looking to implement a similar program, either as professional development or as part of a Master of Library Science degree. To that end, we asked the following research questions:

Research Questions

- Is there a significant difference between pre- and post-test scores in the elementary and secondary cohorts' knowledge of reading comprehension instructional strategies?

- Is there a significant difference between the cohorts in their knowledge of reading comprehension instructional strategies as a result of the instructional intervention?
- Is there a significant interaction effect between the cohort and instructional intervention in their knowledge of reading comprehension instructional strategies?
- Is there a significant difference between pre- and post-test scores in the elementary and secondary cohorts' perceptions regarding the literacy instruction role?
- Is there a significant difference between the cohorts in their perceptions regarding the literacy instruction role as a result of the instructional intervention?
- Is there a significant interaction effect between the cohort and instructional intervention in their perceptions regarding the literacy instruction role?
- How will participants experience a change in their knowledge and perceptions regarding the literacy instruction role of the school librarian as a result of the instructional intervention?

Delimitations

The following boundaries apply to this study:

1. Participants must have a minimum of one year of work experience as a K-12 school librarian in Tennessee.

2. Participants must hold a valid Tennessee teaching license including endorsement for Library Information Specialist PreK-12.

CHAPTER II

LITERATURE REVIEW

Introduction

The Every Student Succeeds Act (ESSA) of 2015 stipulated that school librarians are part of the “literacy instruction team”, a group also comprised of classroom teachers and reading specialists. While this mandate opens up unprecedented levels of collaboration between these educators, there may be several obstacles to full implementation. Among these hurdles are school librarian knowledge of literacy instruction practices, as well as school librarian attitudes regarding their role in literacy education. Many librarians see their literacy role as pertaining primarily to the encouragement and motivation of students in their enjoyment of reading (Asselin, 2003; Carl, 2007; Everhart, 2013); librarians often do not feel their priority is to reinforce specific literacy instruction tasks such as reading comprehension strategies (Moreillon, 2014). This study seeks to investigate the effect of literacy instruction training on school librarian knowledge of reading comprehension strategies, as well as librarian perceptions regarding their role on the literacy instruction team.

This literature review will begin with a discussion of school librarian instructional mandates, then will continue with an examination of prior research in understanding school librarian knowledge and perceptions regarding literacy instruction. Research began with the use of the search terms “school librarian and literacy” as well as “school librarian and attitudes” to pull a baseline of information. Further sources of information were found through a hand search of

“School Library Research”, a leading journal in this field. Dissertations of similar professional development training were also examined for this literature review.

Discussion in this chapter is organized into the following sections: (1) school librarian instructional standards, (2) school librarian knowledge of literacy instruction, (3) school librarian perceptions regarding literacy instruction, (4) designing literacy instruction for school librarians, and (5) a theoretical framework behind the instructional intervention.

School Librarian Instructional Standards

Although Tennessee mandates instructional standards for classroom teachers by grade and subject matter, no specific instructional standards exist at the state level for school librarians. Instead, librarians must complement the instruction of classroom teacher colleagues at their school and in doing so must learn the instructional standards for a variety of subjects and grade levels. Librarians also follow the instructional standards of their governing professional organization, the American Association of School Librarians (AASL). The AASL has produced many guidelines and standards in accordance with developments in national instructional policy. With this lack of a state mandate, the responsibility of supporting state and professional instructional guidelines largely falls to the individual school librarian. As educators who are typically considered support staff (and therefore possibly expendable in times of budget shortfalls) however, it is in the best interest of every school librarian to continually strive to demonstrate their importance to school instruction through their support of

instructional standards (Moreillon, 2013a; Will, 2016). Therefore, although instructional standards for librarians are not prescribed in Tennessee, school librarians have a vested interest in knowing and supporting the objectives.

The school librarian instructional standards which have the most widespread acceptance are those produced by the AASL. The AASL released a series of school librarian standards and position statements between 2007 and 2009 which clearly define the organization's charge to promote the teaching of reading comprehension strategies by librarians. Reading comprehension strategy instruction is present in many of the standards presented in the 2007 *Standards for the 21st-Century Learner*; among these are strategies to activate background knowledge and the use of questioning to promote comprehension (AASL, 2007). Two documents released by the AASL in 2009, the *Position Statement on the School Library Media Specialist's Role in Reading* as well as *Empowering Learners: Guidelines for School Library Programs*, also explicitly define a reading comprehension instructional role. According to the *Position Statement*:

[T]he school librarian has a key role in supporting print and online reading comprehension strategy instruction in collaboration with classroom teachers and reading specialists. School librarians co-design, co-implement, and co-evaluate interdisciplinary lessons and units of instruction that result in increased student learning. (AASL, 2009b, p.1)

These literacy instruction tasks are further detailed in *Empowering Learners*: "library media specialists model and collaboratively teach reading comprehension strategies: assess and use background knowledge, pose and answer questions

that are appropriate to the task, make predictions and inferences, determine main ideas, and monitor reading comprehension, as well as the learning process” (AASL, 2009a, p. 22). These documents clearly describe literacy instructional duties that transcend a mere support role.

Beyond professional mandates, federal legislation has also stipulated that school librarians take a greater involvement in literacy instruction. The Common Core State Standards (CCSS) made several large-scale English Language Arts (ELA) recommendations which directly impacted the work of school librarians; examples include the prescription of percentages of informational text to be read by grade level, as well as the staircase of text complexity mandated by grade level (Uecker, Kelly, & Napierala, 2014). The CCSS also prompted school librarians to instruct students in reading comprehension strategies through specific ELA standards. Moreillon (2013b) produced a matrix indicating the direct overlap of these CCSS with the AASL standards; she found fourteen individual standards matches covering strategies including activating background knowledge, determining main ideas, and drawing inferences.

Aside from CCSS, another federal mandate impacting school librarians with regard to reading comprehension instruction was the No Child Left Behind (NCLB) Act of 2001. This legislation put a requirement for evidence-based instructional practices and interventions into place, with the goal of helping all students reach end-of-year grade-level targets. To meet this requirement, many states selected a method called Response to Intervention (RtI).

RtI is a program of tiered intervention by which students are screened and monitored for their placement in one of three levels of instructional intervention. Tier 1 is simply regular classroom instruction, and is the placement for the majority of students. Tier 2 is a first level treatment group consisting of small group or individualized instruction. Tier 3 is the highest level of intervention, and is for students who have not made gains in achievement at the prior two levels. Tier 3 students typically receive individualized instruction, possibly including special education placement.

In a 2012 survey of school librarians (Robins & Antrim, 2012), researchers found that 62% of the librarians were involved at some level in assisting with RtI instruction, with 60% having implemented interventions or enrichments directly supporting one of the three RtI levels. Some of the literacy skills specifically cited by librarians as areas of instruction were reading comprehension and fluency. Assisting with RtI was a beneficial experience for the librarians: several librarians mentioned that this was a helpful way to identify struggling readers to ensure increased individual attention to these children (Robins & Antrim, 2012). To maximize their assistance to students when implementing RtI, school librarians will need a strong knowledge of literacy instruction strategies including reading comprehension strategies.

School Librarian Knowledge of Literacy Instruction

Building on a foundation of librarian professional mandates and prior federal legislation, ESSA's directive for a literacy instruction team potentially

marks a new era of heightened lesson planning and cooperation between librarians, classroom teachers, and reading specialists; however, with this elevated role comes greater responsibility for strong knowledge of literacy instruction techniques. Currently, the literacy instruction role of librarians is most commonly limited to either motivation of student reading (including collection development) or the teaching of “information literacy”, a wide-ranging term pointing to research skills and utilization of media for information-seeking (Latham, Gross, & Witte, 2013; Moreillon, 2009). While these functions are important within the role of school librarianship, the dearth of reading skills instruction often missing from today’s school library lessons may partially be attributed to a lack of formal education in literacy strategies during librarian preparation programs.

The American Library Association, in conjunction with its division the American Association of School Libraries, is responsible for the accreditation of school librarian preparation programs. In its *2010 Standards for Initial Preparation of School Librarians*, the ALA/AASL stipulated that preparation programs should teach literacy strategies under standard 2.4: “Candidates collaborate with classroom teachers to reinforce a wide variety of reading instructional strategies to ensure P-12 students are able to create meaning from text.” (ALA & AASL, 2010, p. 6). Despite this mandate, many programs do not offer a stand-alone course in literacy instruction nor do they make it clear the degree to which this content is possibly available through other coursework.

Many school librarians begin their careers as classroom teachers and therefore hold undergraduate teaching degrees. The *Tennessee Educator Preparation Policy* describes the requirements for undergraduates seeking Tennessee initial teacher licensure. It states that all candidates seeking licensure through the middle school grades must complete coursework designed to teach reading instruction strategies within the context of their subject area (TDOE, 2014, p. 34). Undergraduate teacher preparation programs, therefore, are required to include a substantial course in literacy instruction strategies; the *Preparation Policy* describes coursework topics including but not limited to phonemic awareness, decoding, fluency, and reading comprehension.

Although such a course in their undergraduate education would be very helpful, there is no guarantee that all school librarians will receive this training because some choose to bypass classroom teaching and come straight to the library. Prior classroom teaching experience is not a requirement for school librarianship in Tennessee; instead the requirements are purely educational. Tennessee school librarians are currently required to hold a master's degree with a concentration in library science. Seven universities in Tennessee offer school librarian preparation programs, and only two are accredited by the ALA/AASL (TDOE, 2017a). In analyzing the online course catalogs of all seven universities, only one of the accredited programs was found to offer a course in literacy instruction entitled "Teaching Reading and Writing in Content Area". One other non-accredited program was also found to offer a literacy course called "Literacy Across the Curriculum". This shortage of university instruction indicates that the

majority of pre-service school librarians in Tennessee will not receive substantial literacy training, such as reading comprehension strategies, through their graduate-level librarian preparation programs. As school librarians are directed through both professional standards as well as federal legislation to teach literacy instruction strategies, and as library science programs are mandated through professional accreditation requirements to teach literacy strategies, the lack of defined coursework in Tennessee school librarian preparation programs demonstrates a puzzling disconnect.

Research indicates that practicing school librarians often do not receive school-wide professional development, as they are often called upon to provide relief time for classroom teachers to attend the training (Small & Stewart, 2013). Other professional development is simply designed with classroom teachers in mind.

Tennessee's current literacy initiative, Read to be Ready, is an evidence-based early literacy program consisting of several major components which intervene at both the school and home levels (TDOE, 2016, 2017b). One of the most prominent instructional components of the program is its coaching network: school-based educators can volunteer to receive training in literacy strategies in order to take subsequent leadership roles as district Read to be Ready coaches. Coaches then visit individual schools to train classroom teachers on these instructional strategies. According to the Director of Reading Coaching for Tennessee's Department of Education, librarians are not specifically excluded from opportunities to become a coach, nor are they specifically excluded from

professional development once coaches visit schools. The director conceded, however, that the focus of coaching instruction is early elementary classroom teachers, and that any librarian training is at the discretion of individual school districts (E. Norton, personal communication, March 4, 2017). Although Tennessee elementary school librarians would greatly benefit from professional development offered through Read to be Ready, the director's comments suggest that it is unlikely that substantial numbers of librarians will take part.

School Librarian Perceptions Regarding Literacy Instruction

As the prior section demonstrates, questions remain regarding the strength of Tennessee school librarian preparation programs in teaching literacy instruction strategies. In addition to this lack of coursework, evidence suggests another problem in that there appears to be a widespread perception by librarians that literacy instruction is not a priority (Moreillon, 2009, 2014). Therefore, even if school librarians are taught literacy instruction strategies, they will also require intervention in order to change their perceptions regarding their literacy instruction role.

Will (2016) reported on the successful collaboration between two school librarians and their classroom teacher colleagues at a Connecticut high school. She described the school librarians as perceiving their instructional role to be solely research-skills focused: they felt their primary instructional responsibilities were to teach students how to locate and utilize online content, as well as instruct their teachers on how to incorporate these skills into their lessons. The

instructional tasks Will described are known as “information literacy”, also referred to as “21st Century Skills” by the AASL (AASL, 2007). Latham, Gross, & Witte (2013) discussed the current librarian emphasis on 21st century skills by defining the three closely related proficiencies of information literacy, media literacy, and information and communication technology (ICT) literacy. They explained that the Common Core State Standards emphasize these competencies as part of their focus on student research knowledge, which may partly explain the high prioritization given to the teaching of these skills by librarians.

Use of these terms may blur the distinction of what constitutes the concept of “literacy”. In the aforementioned context, the word “literacy” is used interchangeably with the idea of “proficiency”. The terms of “information literacy”, “media literacy” and “ICT literacy” became more commonplace upon the 2007 publication of the AASL’s *Standards for the 21st-Century Learner*, and have possibly added to the confusion regarding the school librarian’s literacy (as in reading) instruction role.

There is research that indicates that this instructional focus on information literacy skills may be more acute at the secondary level. Lea (2013) conducted a qualitative study on the instructional and administrative roles of school librarians, and found that differences existed in the manner by which elementary school librarians and secondary school librarians characterized their primary job duties. Elementary school librarians were more likely to prefer the term of “teacher” in describing their instructional role, whereas secondary school librarians preferred

the term “information specialist”. These titles reflect terminology defined by *Information Power* (AASL, 1998), the set of school librarian instructional standards which were the predecessor to the current *Standards for the 21st Century Learner* (AASL, 2007). *Information Power* (AASL, 1998) described the librarian’s role of “teacher” as assisting in meeting student learning needs, both in the library as well as in the classroom. The role of “information specialist” however encompassed a technology focus with such activities as the evaluation of information sources as well as traditional reference services to students.

These results support earlier findings by McCracken (2001) who surveyed over 500 school librarians to understand their prioritization and implementation of the roles detailed in *Information Power*. Like Lea (2013), McCracken also found a significant difference between elementary and secondary school librarians in the importance that was placed on the “information specialist” role. The results indicated that secondary school librarians placed far more of a priority on the information specialist role than did elementary school librarians.

In the same year in which McCracken’s results were published, another study with similar findings was reported. Research by McCoy (2001) surveyed 270 school librarians to understand the priority they placed on different job competencies needed in their profession. The researcher found that high school librarians placed a higher priority on the information specialist tasks of technology support and reference services for students and teachers; elementary school librarians valued the coordination of reading promotion activities, which supports the teaching role. Notably, the researcher found that secondary librarians felt

they were expected to serve as a technology specialist for teachers at a rate significantly higher than that of elementary librarians. Some of the specific technology specialist tasks cited by the author included help with multimedia production and presentation software assistance.

In all, this research indicated that there may be differences in how elementary and secondary school librarians approach the instructional role. The literature suggested that elementary school librarians place a higher priority on the teaching role, whereas secondary school librarians emphasize technology usage through the information specialist role. In the context of this study, this research indicated that possible differences between elementary and secondary school librarians should be measured.

Regardless of instructional grade level, however, one librarian responsibility with nearly universal acceptance is that of motivating students to have a love of reading. Everhart (2013) toured exemplary school libraries in thirty-five states and used the AASL's "School Library Program Evaluation Rubric" to measure the quality of services offered. Three of the top six exemplars, as measured by the percentage of programs meeting these goals, spoke to the importance of student reading motivation. Everhart found that 100% of the profiled libraries demonstrated ongoing promotion of literacy, which included collection development, 96% demonstrated activities to encourage a love of reading and 89% demonstrated the use of booktalks and individualized attention to student book selection (Everhart, 2013). These results indicate the priority which school librarians place on literacy, as well as the means by which

they support literacy instruction. In describing librarians as literacy leaders, Cart (2007) placed a similar emphasis on the skills of “creating, sustaining, and promoting a community of readers” rather than the instruction of literacy skills such as reading comprehension (p. 8). And in describing the areas of literacy in which school librarians could demonstrate leadership, Asselin (2003) cited “access and use of resources, reading engagement and information retrieval and processing” (p. 54).

Certainly the responsibilities of instilling a love for reading, as well as the teaching of research skills, technology and media proficiency, and information retrieval tasks, all fall under the school librarian’s job description. These are important skills for which students need instruction and reinforcement, and for which librarians have received special training. But as Moreillon (2009) pointed out, it is not enough: she indicated that while library programming can cultivate an interest in reading, literacy instruction gives students the actual skills they need to become proficient readers.

Moreillon (2014) also addressed the perception some librarians may have that reading strategies instruction is not their job; she challenged this attitude by citing the gains in student achievement that can occur through the teaching of reading comprehension strategies. She also asserted that teaching at this level of literacy instruction will elevate the work of school librarians, as administrators and classroom teachers will recognize the tangible benefits of librarian instruction on student reading achievement (Moreillon, 2013a). Moreillon’s work provides a counterargument to the possible opinion of some school librarians who feel that

reading comprehension instruction is “not my job”. It would be important to stress these points to school librarians in a professional development session on reading comprehension strategies.

Designing Literacy Instruction for School Librarians

Any school librarian professional development emphasizing reading comprehension strategies will need to encompass many instructional aspects. Development of participants’ content knowledge regarding reading comprehension strategies, while foremost, should also be complemented with foundational material such as the federal and professional mandates which demand this level of instruction from librarians. The instruction must seek to dispel the perception that reading comprehension instruction is outside the boundaries of the school librarian’s job. Librarians should also receive training on strategies for collaboration with classroom teachers so that their increased knowledge of reading comprehension strategies may be fully put into practice. Training on all of these instructional topics would help school librarians feel empowered to take their place as full members of the literacy instruction team.

In considering the general structure of librarian professional development, the research indicates many commonalities between best practices for librarians and teachers. Abilock, Harada, and Fontichiaro (2013) described optimal librarian PD as offering a collaborative environment stimulating the exchange of ideas and personal experiences from the workplace. The importance of this collaborative learning environment was further demonstrated in a study of effective teacher PD

by Garet et al. (2001). The study surveyed over 1,000 math and science teachers who had received PD funded through a federal program. Using regression, the researchers determined several factors which had a positive and statistically significant effect on teachers' self-reported knowledge and skills gains. Elements such as strong instructional content as well as active learning opportunities were noted as important; however it was the combination of coherence and collective participation which were primarily touted as effective PD components by the researchers. Coherence refers to content reflecting the workday activities of the teachers; such content was described as being most relevant to PD participants because they are able to make personal connections to the PD's content. Collective participation reflects a collaborative approach to education, and the study found that collaboration was particularly effective when similar groups of teachers were combined: for example, teachers from the same school, or teaching the same subject and/or grade.

There is a viewpoint that the one-day, teacher in-service PD format (often referred to as a "one-shot") has little long-lasting educational value to teachers, and a study by Mundy, Howe, and Kupczynski (2015) affirmed this conclusion. These researchers surveyed nearly 300 K-12 teachers to assess teachers' perceptions of several specific forms of PD. Their data underwent several analyses and found that the most effective PD format was a university graduate course. This result was primarily due to the in-depth treatment of the subject matter afforded at the university level, as compared to the cursory approach of a

one-shot. In addition, the weekly format of university courses was found to be conducive to longer-term instructional gains as compared to the one shot.

Researcher Steven Amendum (2014) also discounted the value of one-shots in producing long-lasting educational gains from teacher PD. His mixed-methods study, analyzing the effectiveness of a reading intervention teacher PD, came to a similar conclusion as Mundy, Howe, and Kupczynski (2015).

Amendum concluded that teachers needed additional support after their training ended, in order for the PD's concepts to be reinforced and fully integrated into the teacher's pedagogy. He recommended PD embedded in professional learning communities as an effective way to provide ongoing teacher support.

An experimental study by Jacob (2017) reiterated Amendum's support of ongoing instructional reinforcement after the conclusion of PD. The study randomly assigned sixty-three teachers to either a control group or an experimental group receiving Evidence-Based Literacy Instruction (EBLI). Jacobs' study produced null findings which were attributed to several implementation problems. In understanding these implementation problems, Jacob felt a primary factor was lack of follow up for the experimental group. He noted that the schools with a successful implementation had largely incorporated the PD into subsequent staff meetings and discussions. In addition to PD follow up, Jacobs also felt that it was important to move the PD delivery from an in-person experience to an online delivery as this would allow for greater opportunity to deliver instruction over a length of time, rather than conducting a one-shot.

Jacobs' call for online delivery of PD over multiple sessions has been championed by many other researchers who have found positive results from the integration of technology into PD. Graves et al. (2010) conducted an experimental study of the effectiveness of a comprehensive reading strategies PD which featured a self-paced and technology-based instruction delivery. The study included a randomized trial at the classroom level, in which the treatment group received the technology-based instruction delivery and the control group received traditional teacher-delivered instruction. Student achievement was measured as the outcome variable. The study found significant effects for the treatment condition. As a result, the researchers recommended the use of a self-paced and technology-based instruction delivery for teacher PD, in lieu of an in-person instructor.

Moreillon (2015, 2016) wrote about the inclusion of technology in librarian PD; in particular, she cited the use of online chat groups in allowing librarians to gravitate toward like-minded professionals on a range of topics. The chat groups required a moderator to introduce topics and facilitate discussions. Moreillon found that this medium allowed participants to increase their knowledge of educator topics in a relaxed environment of peers. Her research suggests that technology can be utilized to provide an additional means of creating the collective participation aspect described in the research by Garet et al. (2001).

In all, these studies indicate that educator PD should promote a collaborative learning environment stressing coherence and collective participation. The use of one-shot instruction should be discouraged; the

evidence demonstrates that PD should be conducted over time so as to give sufficient treatment to the subject matter. To further reinforce the newly acquired concepts, educator PD should offer opportunities to extend the learning after the conclusion of the course. The use of technology, both as a means of course delivery as well as a post-instruction supplement, appears to be effective in promoting longer-term effects of PD instruction.

Theoretical Framework

The instructional intervention delivered during this study focused on reading comprehension strategies that can be implemented as part of regular school library instruction. The intervention utilized two textbooks both written by library science professor Judi Moreillon, Ph.D.: *Coteaching reading comprehension strategies in elementary school libraries: Maximizing your impact* (2013a) and *Coteaching reading comprehension strategies in secondary school libraries: Maximizing your impact* (2012). Moreillon's books present structured lessons around seven reading comprehension strategies, and are developed in such a manner as to scaffold instruction up or down depending upon the grade of the students. Therefore, the study's instructional intervention made the content relevant to all participants, regardless if their student population is in elementary school or at the secondary school level.

Moreillon's lesson plans were created in support of several reading comprehension strategies: activating/building background knowledge, using sensory images, questioning, making predictions/inferences, determining main

ideas, using fix-up options, and synthesizing. Although each of these strategies are valuable for their foundations in evidence-based research, the six-week long implementation of the study prevented sufficient time to cover all seven strategies. Therefore, the first five strategies listed above were selected for this course's instruction, and participants were encouraged to read the subsequent chapters on using fix-up options as well as synthesizing. The strategies selected for instruction flowed in a logical progression around the two major reading comprehension concepts of background knowledge and inferencing. The strategies of using sensory images, questioning, and determining main ideas largely reinforced these two major concepts. Background knowledge and inferencing are supported by two general models of reading comprehension theory: Gernsbacher's Structure-Building model and Kintsch's Construction-Integration (CI) model (McNamara & Magliano, 2009). These models provide an overall framework by which to consider the lessons used in this study's instructional intervention.

Gernsbacher's Structure-Building model involves three main processes: laying a foundation, mapping, and shifting to new structures. As the reader processes a text, they build a mental representation which Gernsbacher refers to as the foundation. The process of laying a foundation is iterative, and occurs as the reader first encounters new information (be it at the beginning of a novel or when the topic changes). Upon this foundation, the reader subsequently maps information that is related to the structure in a process called enhancement. If the incoming information is unrelated to the current structure, however, the reader

will build the foundation of a new structure through a process called shifting; alternatively, unrelated new information may be suppressed or inhibited if the reader detects that the incoming information is irrelevant.

The Structure-Building model therefore emphasizes the role of memory in the mechanisms of enhancement (increasing activation of memory nodes) and suppression (decreasing activation of memory nodes), and proficiency with these mechanisms is also the hallmark of skilled comprehension. Less-skilled readers are not as efficient at suppressing irrelevant information, and will create unnecessary new foundations rather than inhibit unrelated concepts. They need to be explicitly taught literacy strategies that help them connect incoming text concepts to prior knowledge, as well as how to read for purpose so as to ignore irrelevant information (McNamara & Magliano, 2009).

Kintsch's (2005) Construction-Integration model proposes that the text of a sentence can be understood at three levels: the surface structure, the textbase level, and the situation model. The surface structure is simply the words in the text and their connections to one another at the syntactic level. This is a basic level that is assumed to have little to do with comprehension. The bottom level of what is considered comprehension is the textbase level. The primary unit at this level is called a proposition, and it represents one complete idea. A proposition is comprised of a predicate (verbs, modifiers) and an argument (nouns), and ideas are connected through the overlap between arguments. The textbase level feeds into the highest level of sentence structure under the CI model, which is called the situation model.

The situation model is the level of inferencing in which the reader makes connections between the words in the text, connections which were not explicitly mentioned by the author but rather were derived from the reader's background knowledge. This concept points out the subtle but important factor that distinguishes the textbase level from the situation model: at the textbase level, the reader is making connections between the explicit concepts generated by reading the text. At the situation model level, the reader is going past the text by using their background knowledge to generate inferences and concepts which are not explicitly present in the text (McNamara & Magliano, 2009).

A study by Magliano, Loschky, Clinton and Larson (2013) produced a helpful analysis of the manner in which the Structure-Building Model and the Construction-Integration model intersect. The researchers identified three back-end processes needed to produce a mental model of narratives: these back-end processes are event segmentation, inferencing, and structure building.

Event segmentation is the reader's ability to understand the boundaries between sections of a narrative as delineated by time and causality. Inferencing is the concept explained by Kintsch in which one draws upon their background knowledge to fill in gaps in the narrative. The third back-end process of structure building is the same concept Gernsbacher described in building mental models. Magliano et al. (2013) asserted that these back-end processes produce the mental model, which is comprised of the textbase and the situation model's generated inferences. This description explains the manner by which

Gernsbacher's Structure-Building model contributes to the realization of the CI model's components.

Understanding the relationship between these two theories of reading comprehension provides support for instructional strategies that directly address the activation/building of background knowledge, as well as generation of inferences. Furthermore, additional strategies which support these two main areas of reading comprehension are to be encouraged.

A study by Cain, Oakhill, Barnes, and Bryant (2001) reinforces the need for strategies that develop student inferencing ability. Cain et al. found that less skilled comprehenders had difficulty retrieving relevant information needed for inferencing. This retrieval problem led to the generation of incorrect inferences, and the researchers found that this was not due to a memory deficiency; rather the study points to Gernsbacher's conclusion that some readers simply have difficulty in discarding irrelevant information. These results point to the need for explicit strategies that teach readers to have a purpose for reading. Moreillon's strategies of questioning and determining main idea are two such strategies which support the larger concept of inferencing, and were covered in this study's instruction.

Support for the importance of background knowledge to reading comprehension can be found in a 2007 study by Cromley and Azevedo. Their work examined the fit of several statistical models to data gathered from 175 9th grade students. The researchers concluded that background knowledge was one of two factors that made the greatest direct contribution to reading

comprehension achievement: while vocabulary and background knowledge both had a medium-sized effect on comprehension, inferencing only had a small direct effect. The authors explained that background knowledge is essential to the reader's ability to make strong inferences. These results support Moreillon's inclusion of explicit strategies for activating/building background knowledge, as well as the support strategy of using sensory images to activate background knowledge. Both of these strategies were included in this study's instruction.

Conclusions

This study was informed by current literature, which supports the directive that school librarians should be incorporating reading comprehension strategies into their lessons. Despite professional and national mandates for literacy instruction, school librarian preparation programs in Tennessee are currently concentrating on the teaching of other core school librarian proficiencies, such as information literacy, rather than literacy instruction. Many school librarians consequently have the opinion that literacy instruction is a low priority in the context of their other duties. There is evidence that this view of literacy instruction may be further complicated by differences in the manner in which elementary and secondary school librarians prioritize their teaching role. These combined factors have impeded the ability of school librarians to reach their full potential as members of the literacy instruction team.

Professional development opportunities can bridge this gap, and the literature indicates many best practices for school librarian PD. Coherence of

content, in which connections can be made between the daily tasks of librarians and the reading comprehension content, aids in retention of the subject matter. Collective participation of librarians by grade level (i.e. separate groupings of elementary librarians and secondary school librarians) fosters collaboration between similarly situated professionals as well as further retention of the subject matter. Another useful strategy to encourage learning is the integration of technology, which can be a useful means to reinforce the concepts and facilitate collaboration.

Further, the content delivered through the study's professional development emphasized reading comprehension practices which have been scientifically validated as effective instructional strategies. The strategies selected for course instruction build upon the reading comprehension models of Gernsbacher's Structure-Building model and Kintsch's Construction-Integration model. These two models directly overlap and stress the importance of background knowledge and inferencing to the reader's ability to comprehend text. The study utilized Moreillon's textbooks on reading comprehension instruction (2012, 2013a) as a means of teaching participants these two specific strategies, as well as the accompanying strategies of using sensory images, questioning, and determining main idea.

CHAPTER III

METHODOLOGY

Context of the Study

This study called for the delivery of an asynchronous online instructional intervention lasting six weeks. The researcher served as the primary instructor. Research in this subject area called for data from demographic surveys, written short answer responses, and multiple-choice assessments. This use of both quantitative and qualitative data called for a mixed methods approach.

Research Questions

- Is there a significant difference between pre- and post-test scores in the elementary and secondary cohorts' knowledge of reading comprehension instructional strategies?
- Is there a significant difference between the cohorts in their knowledge of reading comprehension instructional strategies as a result of the instructional intervention?
- Is there a significant interaction effect between the cohort and instructional intervention in their knowledge of reading comprehension instructional strategies?

- Is there a significant difference between pre- and post-test scores in the elementary and secondary cohorts' perceptions regarding the literacy instruction role?
- Is there a significant difference between the cohorts in their perceptions regarding the literacy instruction role as a result of the instructional intervention?
- Is there a significant interaction effect between the cohort and instructional intervention in their perceptions regarding the literacy instruction role?
- How will participants experience a change in their knowledge and perceptions regarding the literacy instruction role of the school librarian as a result of the instructional intervention?

Research Design

The goals of this study called for a convergent mixed methods design. Data collection for the quantitative and qualitative strands proceeded concurrently. Upon collection of the final data post-instruction, data analysis for the separate strands was performed.

Quantitative data measuring participant knowledge acquisition of the reading comprehension concepts, as well as participant perceptions of the literacy instruction role, were obtained through the use of a survey instrument pre- and post- instruction. This design allowed the testing of the differences

between elementary and secondary cohorts on instructional strategies and perceptions. This survey instrument appears in Appendix A.

Qualitative data was gathered from participant writings, and included: essays, group discussion board posts, assignments, and emails to the instructor. This data was organized chronologically by individual participant, and was later analyzed to understand any change from pre- to post-instruction in participant knowledge and views of the librarian's literacy instruction role.

Procedures

The instructional intervention was conducted during a 6-week period from June to July 2017. The main focus of all instructional content was on reading comprehension strategies.

All instruction and assessment was delivered through Canvas, (<https://www.instructure.com>) an asynchronous online course management system. The instructional intervention incorporated both video and textual elements in the delivery of content, and presented opportunities for learning through course readings, lecture notes, video lectures, discussion posts, group and individual learning exercises, and assessments. This manner of instruction allowed participants some freedom and autonomy in progressing through the course material within specified weekly deadlines. Understanding of the course content was reinforced through weekly assignments that utilized web 2.0 technology tools in the creation of project deliverables. Prior to the start of class, participants were pre-assessed for their knowledge and perceptions of the

literacy instruction role. Upon completion of the course, participants were post-assessed for any change in knowledge and perceptions.

In keeping with the previously described best practices in K-12 educator PD (Garet et al, 2001), participants were placed in a cohort with similar instructional grade professionals. These cohorts consisted of an elementary school group, as well as a secondary school group comprised of middle and high school librarians. Cohorts were further subdivided into small work groups of approximately 3-4 individuals for the purpose of completing group discussion posts and assignments in a manageable size. Participants received the appropriate copy of Moreillon's reading comprehension strategies book (either elementary or secondary school strategies) in accordance with their assigned cohort. It is important to note that both of Moreillon's books (Moreillon, 2012, 2013a) describe the same strategies, however the secondary school strategies are essentially a scaffolded-up version of the elementary strategies. In addition to the use of separate textbooks, instruction for the different cohorts took place within separate web pages in Canvas. Please refer to the Course Syllabus in Appendix B for specific details regarding course assignments and weekly content, as well as grading procedures.

Following another best practice in educator PD (Amendum, 2014; Jacob, 2017), participants were given an opportunity for continued reinforcement of the instructional concepts after course completion. Participant lesson plan deliverables were placed in an online Google Docs repository for access after the conclusion of the class. These shared lesson plans were intended as a resource

for participants as they integrated the reading comprehension strategies into their teaching post-instruction. The extension of participant knowledge upon the conclusion of the course through use of the lesson plan depository had no bearing on the study's measures. All assessment was completed prior to the archiving of these resources. These resources served only as a means of extending the learning and support available to PD participants in keeping with the best practices for educator PD (Amendum, 2014; Jacob, 2017).

Participants and Sampling

Participants for the professional development (PD) were recruited from throughout Tennessee, representing a wide cross-section of K-12 student living environments (including rural, urban, and suburban areas) as well as a vast range of socioeconomic backgrounds. Participants had to meet several criteria: they were required to be K-12 school librarians with a minimum of one year of work experience, and they were also required to hold a current Tennessee teaching license with a school library media endorsement (therefore no provisional licenses were allowed). Participation was not limited to public school librarians: librarians employed in private school settings were also allowed to participate as long as they met the other criteria.

Recruitment for the online PD began with a direct mailing sent to an initial pool of 120 potential participants. Nearly 350 additional possible participants were subsequently recruited through an emailed solicitation via the state professional organization for school librarians. Interested participants were asked

to complete an online application for admittance to the instructional intervention program. Completed applications were reviewed for adherence to the participation criteria outlined above. Of the completed and verified applicants, thirty-five total participants were selected for the instructional intervention.

Upon being accepted for the online PD, the selected applicants were then solicited for participation in the proposed study. Solicitation for participation in the study did not begin until after IRB approval (Appendix E). All thirty-five participants in the PD agreed to take part in the study, and were required to electronically sign a consent form prior to taking part in the study. Participants were made aware of their ability to withdraw from the study at any time without penalty.

Some participant mortality was realized in that there was a loss of four participants prior to the conclusion of the study. Two participants voluntarily dropped out of the instructional intervention, and another two participants did not complete all post-assessments; therefore the data of only 31 participants was collected and analyzed for the study's results.

These participants primarily worked in public schools ($N = 29$), however two participants were private school librarians. The participants held an average of 8.44 years of prior work experience as a school librarian. A majority of participants (71%) had prior classroom teaching experience before becoming a school librarian; those participants held an average of 6.13 years of prior teaching experience. All participants were female.

Participants admitted to the program were placed in one of two cohorts, depending on their prior work experience: an Elementary practitioner cohort, and a Secondary (middle and high school) practitioner cohort. In this manner, random selection of participants was not possible; instead participants were purposively selected and assigned in accordance with the established criteria. The 31 participants were split almost evenly between the two cohorts: 15 Elementary and 16 Secondary.

Instrument

Quantitative data was gathered pre- and post-instruction through a multiple-choice assessment instrument, and this data measured participant knowledge of literacy strategies as well as participant perceptions of their literacy instruction role. This study's measure, entitled the School Librarian Perceptions and Knowledge Survey, was created by the researcher in accordance with the instructional content of the intervention; please see Appendix A for a copy of the instrument. Survey instruments from two published dissertations, Lee (2009) and Mustain (2006), were reviewed in the creation of the study's instrument. The School Librarian Perceptions and Knowledge Survey followed the format of the Lee instrument, with its separate sections measuring perceptions and knowledge. Many questions were informed by the Mustain instrument in creating the Perceptions section of the School Librarian Perceptions and Knowledge Survey.

Data Collection Procedures

A mix of quantitative and qualitative data was gathered during the participant application process. Participants applied for admission to the instructional intervention, and as part of the application process submitted demographic data to support the quantitative data collection. Applicants also completed a short essay on the topic of the librarian's role in supporting literacy instruction; these essays served as a qualitative pre-assessment of participant attitudes toward the literacy instruction role.

Applicants selected for the study were assessed both pre- and post-instruction with a quantitative instrument (see Appendix A) designed to capture both participant knowledge of reading comprehension strategies as well as participant attitudes toward the literacy instruction role. This data was analyzed to determine (1) any change in knowledge as a result of the instructional intervention, and (2) any change in participant attitudes toward the literacy instruction role as a result of the instructional intervention.

In addition to the quantitative survey instrument, qualitative data was gathered throughout the course instruction to derive any changes in participant knowledge and/or perceptions regarding the literacy instruction role of school librarians.

Reliability

The multiple-choice instrument measured participants' perceptions and knowledge of literacy instruction. One version of the instrument was created so

that the same survey could be administered pre- and post-instruction. In order to ensure test-retest reliability, the reliability coefficient was calculated for both Knowledge and Perceptions.

Reliability of the School Librarian Perceptions and Knowledge Survey was evaluated in two stages. For the Knowledge component of the survey, the reliability index was calculated separately for the pretest and posttest results using the Kuder-Richardson formula 20 (KR-20). Results from the combined cohort performance on the Knowledge pretest produced ($r_{kr20} = 0.53$), and results from the combined cohort performance on the Knowledge posttest produced ($r_{kr20} = 0.77$). These results indicated an acceptable level of reliability for the Knowledge component of the assessment instrument.

Due to its Likert scaling, the Perceptions component of the survey instrument could not be assessed with the Kuder-Richardson formula; instead this section was evaluated for reliability by using the Spearman-Brown formula. For the Perceptions component of the survey, the reliability index was calculated separately for the pretest and posttest results. Results from the combined cohort performance on the Perceptions pretest produced ($r_{sb} = 0.78$), and results from the combined cohort performance on the Perceptions posttest produced ($r_{sb} = 0.83$). These results indicated an acceptable level of reliability for the Perceptions component of the survey instrument.

Reliability of qualitative data gathered during this study was addressed through interrater reliability procedures, including triangulation. Two peer reviewers examined the study's methodology as well as the individual participant

transcripts (including participant essays, online discussion board postings, and emails to the instructor). Both reviewers were faculty members at Middle Tennessee University with extensive prior experience in qualitative research methodology. These reviewers coded the transcripts for open codes in accordance with the guidelines set in the Qualitative Data Coding Matrix (see Appendix C), and their coding was later compared to the researcher's coded transcripts. The results of this preliminary triangulated comparative analysis were mixed. Each individual seemed to be drawn to different aspects of the transcripts, often in line with their own research interests and/or professional background. Therefore, the same items were not coded by all three individuals: the researcher often coded items that the others skipped over, and vice-versa. On the items which all three individuals coded, there was often agreement in the utilized coding scheme; however in some cases two individuals would agree on a coding label and the third individual would call it something else. For example, the coding labels of Literacy Attitudes (LA) and Confidence (CON) were often blended in this manner. Other terms such as Prior Work Experience (PWE) and Prior Education (PE) were far more concrete in definition, and there was a great deal of consensus in their implementation. A seminal piece on qualitative interrater reliability (Armstrong, Gosling, Weinman, & Marteau, 1997) described very similar issues, particularly the difficulty of achieving consistent triangulation as well as the "repackaging" that can occur when one reviewer uses different coding for the same term. According to the conclusions of that research, coding in which the reviewers generally find close agreement in the themes (and

minimal repackaging), is acceptable in terms of interrater reliability. Therefore under these terms it can be stated that the measures undertaken by this study ensured that the analysis and conclusions regarding the qualitative data met interrater reliability.

Validity

Internal Validity

- *Mortality Threat.* The instructional intervention lasted six weeks, and so mortality threat was a concern. Participants had to apply for admission to the instructional intervention, and a statement regarding this concern appeared in the application materials. The statement explained that if selected for the program, participants were asked to participate for the entire six weeks in order to receive the full benefit of instruction. Furthermore, participants were informed that they would receive up to 2.0 Continuing Education Units (CEUs) only if they satisfactorily completed all six weeks of instruction. The IRB consent forms, however, explained that no penalty existed if participants dropped out of the study before completion of all six weeks of instruction. Despite these measures, the study did experience some loss of participants. Halfway through the intervention, two participants dropped out of the study. Another two participants completed all six weeks of instruction, but did not complete all

post-assessments. Therefore, of the original 35 participants admitted to the study, only 31 remained through its conclusion.

Content Validity

Content validity examined two factors:

- *Sampling Validity*: The researcher designed the multiple-choice survey instrument so that it would address content from all areas of the instructional intervention. To achieve this goal, researcher completed a course guide indicating the content to be covered each week of the instructional intervention (see Appendix B). The researcher selected a minimum number of questions from each week's content.
- *Item Validity*: Steps needed to be taken to ensure that each item on the multiple-choice survey instrument was relevant to the course content. To ensure item validity, the researcher had each question within the pool of possible test questions evaluated by a subject expert in reading comprehension to determine item validity. This expert was a faculty member at Middle Tennessee State University with significant research and publications in the area of reading comprehension.

External Validity

The study's results may have been affected by the testing of students prior to the instructional intervention (reactivity), posing a potential threat to external

validity. Another threat to external validity was the lack of random sampling. This will necessarily limit the generalization of findings.

Data Analysis Strategies

Data analysis sought to understand differential changes between the cohorts (elementary versus secondary school librarians), as well as for the class as a whole. For each level, analysis examined possible differences within the constructs of knowledge acquisition and perception change. In order to answer the research questions, the constructs of knowledge acquisition and perception change needed to be evaluated through both quantitative and qualitative means. Data analysis was therefore performed through a multilayered process.

Knowledge Acquisition Construct

Analysis of the knowledge acquisition construct was completed using qualitative and quantitative phases. In the quantitative phase, the survey instrument created for the study measured participant knowledge of reading comprehension instructional strategies before and after instruction. Dependent samples t-tests were performed on each cohort, comparing their pre- and post-instruction results, to determine whether a change in participant knowledge of reading comprehension instructional techniques occurred as a result of instruction. Additional analysis included a 2 (between cohorts) x 2 (pre- to posttest) mixed ANOVA, which compared the two cohorts to understand whether there was a differential response to knowledge of reading comprehension

strategies as a result of the instruction. SPSS software was used to conduct these statistical tests.

In addition to the quantitative analysis, qualitative analysis was undertaken to understand the means by which the instruction had contributed to knowledge acquisition. This analysis was predicated on the hypothesis that structural elements of the course delivery created in response to the review of literature, such as the online format and use of a cohort structure, had been conducive to learning. The qualitative analysis therefore sought to examine the relationship between participant knowledge acquisition and the delivery of the instructional intervention. NVivo 11 software was used to perform this analysis.

Perception Change Construct

Analysis of the perception change construct was completed using qualitative and quantitative phases. In the quantitative phase, the survey instrument created for the study measured participant perceptions of the literacy instruction role before and after instruction. A 2x2 Mixed ANOVA compared the two cohorts to understand whether there was a differential response to the literacy instruction role as a result of the instruction. Following a significant effect for Time, dependent-sample t-tests were performed on each cohort, comparing their pre- and post- instruction results, to examine the practical significance of the changes disaggregated by cohort. SPSS software was used to conduct these statistical tests.

In addition to the quantitative analysis, qualitative analysis was undertaken to understand participant changes in their perceptions of the literacy instruction role. This analysis was predicated on the hypothesis that participant attitudes regarding literacy instruction would individually impact their knowledge acquisition; that is, it was presupposed for example that those individuals demonstrating enthusiasm for the material would learn more and also display a more positive view of the literacy instruction role. The qualitative analysis therefore sought to examine participant shifts in attitude, from onset of instruction to completion, and to analyze the relationship between possible shifts and knowledge acquisition. NVivo 11 software was used to perform this analysis.

Qualitative Analysis Procedures: Knowledge and Perceptions

Participants completed many qualitative assessments during the study. Prior to instruction, they submitted an essay regarding their thoughts on the librarian's literacy instruction role. For this writing, participants were required to answer the question "In 250 to 400 words, describe your views regarding the literacy instruction role of the school librarian. Please speak freely and provide examples from your work experience as illustrations if desired." Participant writings continued throughout class in the form of group discussion posts, assignments, and emails to the instructor. During the final week of instruction, participants were asked to reflect on the following questions in their group discussion posts: "What have you learned in this class? Will you approach your

literacy instruction role differently this fall?" These questions were intended as a counterpoint to the original participant essays written prior to instruction.

All of these participant writings were taken as qualitative data and organized chronologically into individual participant data files. Analysis of participant data occurred on a weekly basis so that changes in participant behavior over the course of the six-week instruction were apparent. In addition to understanding changes at the individual level, the researcher sought to identify patterns of behavior by cohort. The NVivo 11 software (QSR International Pty Ltd.) was used to code and analyze the data files.

Analysis of all qualitative data followed a grounded theory methodology by which participant writings were analyzed for themes, and then coded and grouped under a constant comparative approach (Glaser & Strauss, 1967). Under the constant comparative approach, the researcher follows an iterative process of coding and analysis, such that theoretical ideas are allowed to evolve until a strong understanding of behavior has emerged. Initial coding is completed through an explicit coding procedure, and is then followed by analysis. This analysis may suggest new avenues of thought, by which further coding themes may develop. This process continues until a theory of behavior is finalized (Glaser & Strauss, 1967; Holton, 2007). Using this process of analysis, a theory of participant behavior with regard to knowledge and perception changes emerged.

CHAPTER IV

RESULTS

Overview

This study sought to evaluate the impact of a structured professional development covering literacy instructional strategies on the knowledge and perceptions of a selected group of Tennessee school librarians. A two-part survey instrument was developed to address the research questions. The first part of this instrument was designed to measure participant perceptions regarding the literacy instruction role of the school librarian. The second part of the instrument was designed to measure participant knowledge of reading comprehension instructional strategies. The survey was administered pre- and post- instruction, and results were analyzed to determine any significant mean differences (collectively and by cohort) between the scores collected at each of the two data points. Furthermore, qualitative data gathered from participant writings (including program applications, online discussion board posts, and emails to the instructor) were analyzed to determine any change in participant knowledge and perceptions of the literacy instruction role.

Quantitative Results

Research Questions 1, 2, and 3

The first research questions addressed by this study sought to examine if there were differences between cohorts in their knowledge, whether they grew

from pre- to posttest, and whether that growth was differential as a result of the instructional intervention. The construct of Knowledge was analyzed through each cohort's pre- and post-assessment scores on the 15-question Knowledge component of the survey instrument.

A 2x2 Mixed ANOVA was used to compare the effect of the professional development on participant Knowledge pre- and post- instruction; this analysis sought to understand if there were differences between cohorts, as well as the interaction of Time by Cohort. There was a significant main effect of Time on participant Knowledge gains when combining the results of both cohorts ($F(1, 29) = 89.21, p = .001, \eta_p^2 = .76$), see Table 1, indicating that participants had a significant increase in Knowledge from pre- to post- instruction. The effect size of .76 indicates that the instructional intervention had a large effect on Knowledge gains across the entire group of participants. The main effect for Cohort was not statistically significant ($F(1,29) = .035, p = .854$), which indicates that the two cohorts did not differ significantly on their Knowledge. The interaction of Cohort with Time was not statistically significant ($p = .461$); this indicates that there was no differential effect of the treatment (i.e., the treatment did not work differently in the elementary vs. secondary cohorts). Therefore, although there were statistically significant gains in Knowledge among all participants, there was no statistically significant difference in Knowledge gains between cohorts.

Table 1

Repeated-Measures Analysis of Variance for Knowledge

Source	<i>N</i>	<i>df</i>	<i>F</i>	<i>p</i>	Partial Eta Squared
Time	31	1	89.21	.001	.76
Time * Cohort	31	1	.559	.461	.02

Following a significant effect for Time in the Mixed ANOVA, dependent sample t-tests were performed on each cohort, comparing their pre- and post-instruction Knowledge results from the appropriate section of the survey instrument; these tests determined if the instruction had any effect on participant Knowledge by cohort. The pre-assessment mean descriptive score of the Elementary cohort ($M = 8.13$, $SD = 2.17$; see Table 2) was very similar to that of the Secondary cohort ($M = 7.94$, $SD = 1.73$; see Table 2), meaning that both groups of participants started off at a very similar point in their background knowledge of the subject matter.

Table 2

Descriptive Statistics of Knowledge Scores

	<i>Pre-Assessment</i>			<i>Post-Assessment</i>	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Elementary cohort	15	8.13	2.17	11.6	1.99
Secondary cohort	16	7.94	1.73	12.0	1.63

The post-assessment mean descriptive score of the Elementary cohort ($M = 11.6$, $SD = 1.99$; see Table 2) was also very similar to that of the Secondary cohort ($M = 12.0$, $SD = 1.63$; see Table 2). These results indicate that while both groups of participants completed the instruction with a very similar proficiency of the subject matter, their Knowledge gains marked a substantial improvement over their preliminary Knowledge. Further analysis was required to understand the statistical significance of this improvement in Knowledge.

The dependent-sample t-test further confirmed that both groups experienced a positive change in Knowledge as measured from pre- to posttest. The Elementary cohort had a statistically significant change in Knowledge scores (Mean difference = 3.47, $SD = 2.07$) as measured from pre- to posttest; $t(14) = 6.5$, $p < .001$; see Table 3. Each test had a total of 15 possible points. The results indicate that the Elementary cohort post-assessment scores were on average 3.47 points higher than the pre-assessment. The Secondary cohort also had a statistically significant change in Knowledge scores (Mean difference = 4.06, $SD = 2.35$) as measured from pre- to posttest; $t(15) = 6.91$, $p < .001$; see Table 3. This means that the Secondary cohort post-assessment scores were on average 4.06 points higher than the pre-assessment.

Table 3

Results of Dependent t-test on Knowledge Outcome

	<i>Mean difference</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Elementary cohort	3.47	2.07	6.50	14	0.001
Secondary cohort	4.06	2.35	6.91	15	0.001

Note. The mean differences were calculated by subtracting pre-test means from posttest means. Positive values indicate posttest scores were greater than pretest.

The results of the dependent sample t-test demonstrate that while both groups made statistically significant gains in their Knowledge by the end of the instruction, the Secondary cohort made slightly greater improvement (i.e., 6.91 vs. 6.50).

Research Questions 4, 5, and 6

The next set of research questions addressed sought to examine if there were differences between cohorts on their perceptions of their role as a literacy instructor, whether these perceptions changed from pre- to posttest, and whether any changes differed by cohort as a result of the instructional intervention. The construct of Perception was analyzed through each cohort's pre- and post-assessment scores on the 15-question Perception component of the survey instrument.

A 2 x 2 Mixed ANOVA was used to compare the effect of the professional development on participant Perceptions pre- and post- instruction; this analysis sought to understand if there were differences between cohorts, as well as the interaction of Time by Cohort. There was a significant main effect of Time on participant Perception gains when combining the results of both cohorts ($F(1, 29) = 10.98, p = .002, \eta_p^2 = .28$); see Table 4, indicating that participants had a significant positive change in Perceptions from pre- to post- instruction. The effect size of .28 indicates that the instructional intervention had a large effect on Perception gains across the entire group of participants, such that the average participant held a more positive view of the literacy instruction role after instruction. The main effect for Cohort was not statistically significantly different ($F(1, 29) = .093, p = .762$, indicating that there were no differences in Perception between the two cohorts. The interaction of Cohort with Time was not statistically significant ($p = .875$); this indicates that there was no differential effect of the treatment. Therefore, although there were statistically significant positive gains in Perception among all participants, there was no statistically significant difference in Perception by cohort.

Table 4

Repeated-Measures Analysis of Variance for Perceptions

Source	<i>N</i>	<i>df</i>	<i>F</i>	<i>p</i>	Partial Eta Squared
Time	31	1	10.98	.002	.28
Time * Cohort	31	1	.025	.875	.00

Following a significant effect for Time in the Mixed ANOVA, dependent-sample t-tests were performed on each cohort, comparing their pre- and post-instruction Perception results; these tests determined if the instruction had any effect on participant Perception. Due to the scaling of the instrument, a higher score indicated a more negative perception of the literacy instruction role. The pre-assessment mean descriptive score of the Elementary cohort ($M = 37.80$, $SD = 8.71$; see Table 5) was one point lower than that of the Secondary cohort ($M = 38.75$, $SD = 6.71$; see Table 5). This means that on average both groups of participants started off at a similar point in their initial perceptions of the literacy instruction role; however the Elementary cohort as a whole held a slightly more positive initial view of the literacy instruction role.

Table 5

Descriptive Statistics of Perceptions Scores

	<i>n</i>	<i>Pre-Assessment</i>		<i>Post-Assessment</i>	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Elementary cohort	15	37.80	8.71	34.73	8.66
Secondary cohort	16	38.75	6.71	35.38	6.77

The post-assessment mean scores of the Elementary cohort ($M = 34.73$, $SD = 8.66$; see Table 5) was less than one point lower than that of the Secondary cohort ($M = 35.38$, $SD = 6.77$; see Table 5). These results indicate that while both groups of participants finished their instruction with an improved perception of the literacy instruction role, the Elementary cohort on average remained slightly more positive in their Perceptions. Further analysis was necessary to understand the statistical significance of this change in Perceptions.

The dependent-sample t-test further illustrated that both groups experienced a positive change in Perceptions as measured from pre- to posttest. The Elementary cohort had a statistically significant change in Perception scores ($M = 3.07$, $SD = 4.65$) as measured from pre- to posttest; $t(14) = 2.55$, $p = 0.023$; see Table 6. Post-assessment scores were on average 3.07 points lower than the pre-assessment for the Elementary cohort, indicating a positive improvement in the group's Perceptions. The Secondary cohort also had a statistically significant change in Perception scores ($M = 3.38$, $SD = 6.03$) as measured from

pre- to posttest; $t(15) = 2.24$, $p = 0.041$; see Table 6. Secondary cohort post-assessment scores were on average 3.38 points lower than the pre-assessment, indicating a more positive Perception of the literacy instruction role after the instructional intervention.

Table 6

Results of Dependent t-test on Perceptions Outcome

	<i>Mean difference</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Elementary cohort	3.07	4.65	2.55	14	0.023
Secondary cohort	3.38	6.03	2.24	15	0.041

The results of the dependent t-tests indicate that while both groups made improvements in their Perceptions by the end of the instruction, the Secondary cohort made a slightly more pronounced positive shift in Perception.

Qualitative Results

Research Question 7

The seventh research question addressed was: How will participants experience a change in their knowledge and perceptions regarding the literacy instruction role of the school librarian as a result of the instructional intervention? This inquiry required a qualitative research methodology to analyze the constructs of both knowledge acquisition as well as perception change.

Data analysis began with the organization of participant data such that an individual file was created in NVivo for each of the 31 participants. Each participant's data was organized chronologically by the week of instruction. Coding of themes proceeded chronologically so that individual changes in knowledge and/or perceptions over time could be identified. The individual changes were subsequently grouped together by cohort to understand any differences at the cohort level.

To begin coding and organizing these individual participant data files, a coding matrix was created based upon the Perceptions component of the quantitative survey instrument. The 15 survey questions were grouped into four themes: Literacy Instruction Role (LIR), Literacy Attitudes (LA), Traditional Instruction Role (TIR), and Confidence (CON). These four themes formed the basis for the open codes under which participant data files were initially analyzed and coded using the NVivo 11 software. Upon initial analysis, additional themes emerged which prompted the researcher to develop three axial codes for use in participant data coding; these were: Collaboration (COL), Prior Work Experience (PWE), and Prior Education (PE). This early coding therefore organized participant writings by seven defined codes, resulting in many references within the participant data files per code (see Table 7).

Table 7

Results of Open and Axial Coding

Code Name	Code Abbreviation	Number of References
Literacy Instruction Role	LIR	101
Literacy Attitudes	LA	135
Traditional Instruction Role	TIR	74
Confidence	CON	37
Collaboration	COL	53
Prior Work Experience	PWE	27
Prior Education	PE	11

The Traditional Instruction Role (TIR) was primarily characterized by the job duties of teaching information literacy skills as well as collection development of new library materials. As was previously noted, many school librarians prioritize these tasks over the direct support of student reading skills (Latham, Gross, & Witte, 2013; Will, 2016). In contrast, the Literacy Instruction Role (LIR) referred to the school librarian's duties in supporting and teaching literacy skills such as reading comprehension strategies, either through co-teaching or direct instruction. Closely aligned with LIR was Literacy Attitudes (LA), which referred to the librarian's acceptance and embrace of this responsibility. In coding participant writings, the researcher looked for evidence of LA as it was necessary for participant development of LIR.

Many of the participants expressed a focus on TIR through their initial program applications, a written assignment which prompted the librarians to express their views of the literacy instruction role. This assignment was intended as a baseline measurement of participant LA and LIR. Student 19 wrote “I believe the school librarian is an essential educational team member with responsibility for providing access to and maintenance of literature that supports the educational mission and curricular goals of the school.” This was a predominant view expressed by the participants across cohorts; and while certainly this is an essential job duty, it highlights the support role (rather than instructional role) which librarians often feel most comfortable performing in schools (Cart, 2007; Everhart, 2013). Student 20 discussed the information literacy role, another commonly discussed topic in the applications: “We emphasize that citing sources properly avoids plagiarism. We emphasize using databases as reliable sources.”

Although LIR was missing from many participant application writings, nearly all of the participants who did exhibit LIR prior to class start were Elementary cohort members. For example, Student 7 wrote “Librarians should be involved in knowing how students are doing in reading classes. Knowledgeable librarians can then provide more guided assistance to students in choosing books that are both interesting but help foster stronger reading skills.” Other Elementary cohort members cited specific literacy strategies; Student 14 wrote:

As a librarian, an interactive read aloud comes naturally. I pause to check for understanding as I’m reading to the students. I model my thinking out

loud as we read. We predict and ask questions. This method of reading out loud involves the students and models for them what their thinking should be as they read.

It was from the initial round of coding, using open and axial codes, that themes were generated and patterns began to emerge. As a result of this early work, the researcher was able to consolidate the ideas into a new group of selective codes (see Table 8). The goal of the selective coding was to further isolate major participant viewpoints into discrete blocks, from which a possible change in perceptions and/or knowledge could clearly be indicated when analyzing the individual's writings over time.

Table 8

Emergent Themes from Open and Axial Coding (Selective Coding)

Code	Characteristics of Selective Code	Related Codes
A	Demonstrated enthusiasm about the new ideas from class.	High LA, COL
B	Some limited experience with the literacy instruction role; aspire to be more intentional in the future.	Moderate LIR
C	A newcomer to the literacy instruction role.	Low LIR
D	Big attitude shift regarding the literacy instruction role.	High LA, CON
E	Very traditional librarian role initially.	High TIR

The selective codes were designed to isolate specific relevant factors in diagnosing the trajectory of possible changing perceptions and/or knowledge. For example, it was important to distinguish who was very new to the idea of LIR versus those who had some prior (but limited) experience; these two groups of individuals largely related to the course material differently. Participants who were brand new often displayed a willingness to learn, but were perhaps timid in asserting ideas during group discussions. Others who came into the class with some background knowledge could sometimes be hindered by this experience, such as Student 23 wrote in her initial application:

Two years ago, my principal mandated that I teach from something called the Comprehension Toolkit. I have struggled with it. I feel that the methods in the toolkit are stale and repetitive. I would like to return to school in the fall armed with evidence that there are much more effective ways to teach reading comprehension through the library.

Student 23 would later concede at the conclusion of class that her principal's mandate had been correct:

I have an awesome principal, and he always seems to be ahead of the game in implementing programs. I guess he had insight here too. The questioning, inferencing, and more were in both the Moreillon book and the toolkit. It offered validation that it was relevant to the library.

Therefore, the presence of background knowledge was not always a positive, as there were instances in which this knowledge seemed to negatively affect participant LA due to their preconceptions.

Another important point regarding the selective coding is the idea that these five codes were not mutually exclusive; rather, most participants demonstrated multiple codes (see Appendix D). And although some codes seemed to naturally go together, this wasn't always the case; for example it would seem that the big attitude shift (code D) would be predicated on demonstrated enthusiasm for the new ideas presented in class (code A), but this wasn't always true. Conversely, sometimes students seemed to enjoy the course material, but did not make the shift toward high LIR by the end. In order to be coded with Code D, indicating a vastly improved acceptance of the LIR, a participant needed to begin class with high TIR and demonstrate growth in knowledge and perceptions. Participants receiving a code of D often made overt remarks in their writings regarding their changed perceptions as a result of the instruction.

In all, the selective coding was utilized to answer the seventh research question of this study, namely the manner by which the instruction changed participant knowledge and perceptions of the literacy instruction role. In reviewing participant writings during their instruction, it was very apparent that the constructs of knowledge and perceptions were firmly intertwined.

Qualitative analysis of the knowledge construct was approached from the hypothesis that structural elements of the course delivery had been conducive to learning. In reviewing participant writings which had been coded with the selective code A (high enthusiasm), a common theme emerged indicating that the collaborative nature of the class had contributed to student learning.

The course was initially structured to promote a welcoming learning environment through several means, one of which was the use of cohorts to place participants with others working at the same instructional level. In this 6-week course, it was necessary to group individuals with others who had shared experiences as a means of quickly fostering camaraderie. As indicated by many participant writings, the use of cohorts created an instructional setting in which students could easily learn from others; wrote Student 4:

As a high school librarian, I am still trying to find my niche. I have only been in high school since January and that is one reason I was excited about this opportunity to learn more about literacy at the secondary level and be able to discuss with other high school librarians.

In addition to the use of cohorts, another aspect of the course structure which appeared to foster a collaborative environment was the use of discussion boards. Discussion boards were available in two formats: a cohort-wide discussion of the week's core content, as well as a small-group discussion of a weekly technology tie-in to the curriculum. There was a different group dynamic within each format accordingly. In class-wide discussions, there was a rich exchange of ideas in which participants drew from their work experiences in interpreting the weekly course material. A spirit of fellowship and acceptance quickly emerged in each cohort such that participants felt at ease in asking for help when needed. For example, in Week 3, student 11 wrote:

I must say, I found this chapter more challenging than the previous one. While I can definitely see the value in it, teaching students about sensory

images will definitely take me out of my comfort zone!...My major struggles with this week are: 1. I have zero experience or comfort with using a think-aloud to talk about my feelings before, during, and after reading....Any suggestions???

Upon posting this plea for help, eight of her classmates (therefore over half of her cohort) responded to Student 11 with concrete ideas on how to proceed. The experience seemed to embolden Student 11 to continue adding to class discussions in subsequent weeks, as evidenced by her frequency of posting and depth of comments; as a result, she appeared to develop more confidence during this time. By the end of class, Student 11 wrote: "I want to thank each of you in this group...As a new K-12 librarian, it has been immensely gratifying to join together with you all as a group and learn from your years of expertise."

In contrast to the class-wide discussions, another interesting scenario unfolded within the small-group discussions. Consisting of only three or four students, the small-groups were a place for students to complete a web-based technology assignment related to that week's reading comprehension strategy. In contrast to the class-wide discussions, where the librarians with more years of experience tended to take a leadership role, the small-groups held more of an even playing field. Nearly all of the librarians held some degree of technology proficiency as cultivated through their on-the-job experiences; perhaps as a consequence, they seemingly conveyed a friendly but business-like demeanor through their discussion posts in completing tasks. There was less exchange of ideas and analysis than occurred at the cohort-wide discussion level. Although

both types of discussion groups appeared to be beneficial in reinforcing the weekly instruction, it appeared that the cohort-wide discussions instilled a greater level of interaction between the participants. In all, these findings regarding the importance of the cohorts and discussion boards mirrors the aforementioned research of Garet et al. (2001), which touted the importance of collective participation as a component of effective teacher PD.

This combination of cohort use as well as large and small group discussion facilitated a learning environment in which participants appeared empowered to contribute and learn. The researcher noted many individual participants, including Student 11, who indicated greater confidence in the subject matter by the end of class. Perhaps as a result of this heightened confidence stemming from their knowledge gains, many students discussed their future plans for greater collaboration in their schools. After week 4's lesson on questioning strategies, Student 33 wrote: "I am going to plan on taking these plans, adjusting them for my situation, and then propose a collaboration with the P.E. teacher. Hopefully, we can work something out!" In all, it was apparent through the coding scheme that as knowledge increased, an increase in participant confidence and collaboration followed.

These factors of confidence and collaboration, driven by knowledge gains, appeared to have also had a positive effect on participant gains in LA and subsequently on LIR. The more participants learned, both through their coursework as well as through their interactions with other students, the more confident they became regarding the reading comprehension strategies.

Although knowledge and confidence were important, however, they were not the only ingredients in improved LIR.

The analysis of the qualitative data revealed that gains in LIR derived from a two-pronged approach: in order to champion the literacy instruction role, a librarian requires both the knowledge of literacy strategies as well as the conviction that these strategies are a worthwhile expenditure of the librarian's instructional time. Therefore, the other half of this reciprocal relationship was the perception construct. Qualitative analysis of the perception construct was approached from the hypothesis that individuals demonstrating enthusiasm for the course material would learn more and also display a more positive view of the literacy instruction role. In analyzing the results of the selective coding, a pattern emerged by which participants demonstrated enthusiasm for the course material when it had clear connections to their work as librarians. In most cases, these connections derived from past experiences on the job, but at other times these connections were related to aspirational experiences on the job (such as lessons or co-teaching they planned to do in the future). Garet et al. (2001) referred to PD content which reflects the real-life work activities of teachers as "coherence", and it appears that coherence between the subject matter and participants' jobs led to greater enthusiasm for the strategies presented in the course.

One early example of coherence occurred in week one of class in which students were asked to watch a video lecture and then discuss their views regarding top-down and bottom-up processing. This exchange was held in the

cohort-wide discussion groups, and it helped to secure early acceptance of the course content among many of the participants. Students made connections between the week's content and their prior work experiences, and this led to lengthy and inspired discussions in each cohort. Student 10 wrote:

I guess I come to this discussion with a slightly unique background. I began my teaching career with 1st grade. I spent 2 years teaching 1st grade and then moved to Kindergarten for 3 years. I was fortunate to teach with someone who had nearly 30 years of Kindergarten experience and was a wonderful mentor. As a result, I followed in her footsteps and taught a mix of phonics and sight words. I feel that both are equally important.

This passage is representative of many participants' views: it describes the student's prior work experience in justifying her opinion regarding the question posed to the group. Most of the participants answered using a similar manner of prefacing their responses with a listing of prior work experience; they also held a similar level of conviction in their writings.

Another factor which encouraged participant acceptance and enthusiasm of the literacy strategies was the realization by many of the participants that they were already using some of these strategies in their teaching. Student 28 wrote:

I use text-to-self in my library frequently. I didn't know it was a literacy strategy really. I just knew it helped my students understand what they were reading better. This year I plan on trying to bring in the other two strategies into my lessons more often. I really liked the idea of the

author/illustrator studies. One of my co-workers and I had talked about it last year, but didn't get to implement it. Reading about it in the book made me even more excited about trying it.

As Student 28 indicates, the coursework filled in some gaps in her knowledge as well as re-energized her dedication to these strategies. Also, as noted by her comment on "author/illustrator studies", the group discussions gave her new ideas on how to implement the strategies. Such comments were beneficial not only in showcasing the individual student enthusiasm and heightened LA, but also in inspiring classmates to adopt a similar mindset.

One notable exception to this increase in LA was the description by some participants of the structural problems in their schools which impeded their adoption of the LIR. A few librarians in each cohort noted such problems as classroom teacher lack of interest in collaboration, as well as limits on the LIR as imposed by school principals. Student 18 described her dilemma:

I agree with you that I have a REALLY hard time convincing teachers to co-teach with me...they are so stressed about test scores and everything they do not want to give up control over standards they are supposed to be teaching.

One positive consequence of these comments was the quick response of cohort members to offer possible remedies to the perceived problems. It therefore appeared that the positive gains in LA experienced by some students far outweighed the negative perceptions of others, and at times had a remediating effect on low LA students.

A particular challenge in presenting this training to school librarians was making the content relevant to secondary school librarians; as several researchers including McCoy (2011) demonstrated, secondary librarians are less likely to see themselves as teachers of literacy skills. Coherence was a critical component of the instruction for both groups, but perhaps even more so for secondary practitioners. An unexpected finding was that secondary librarians demonstrated a great deal of enthusiasm for the material as they made new connections to their professional experiences, as well as breakthroughs in their understanding of literacy. Along these lines, Student 21 wrote:

Like others had discussed, by the time students get to middle school many have been put in the special ed track. Some are missed, but it's not huge numbers. So what about the students who still can't read at grade level? I hear so many teachers call them "lazy" simply because they are so frustrated by the fact the students aren't at or near grade level. I've been to a few workshops to be trained on students who were dyslexic, but I had never heard of hyperlexia. Even though you stated that it is very rare, it sounds so much like a 7th grade boy I have taught for 2 years in Tier class. Thank you for letting me see the possibilities.

Other students, such as Student 6, pointed out their prior misconceptions as well as newfound appreciation for the relevance of these strategies to their jobs:

As a high school librarian, I have assumed, maybe erroneously, that my students already know how to read. I can't think how they would have passed 8th grade if they couldn't...I think it would be useful for us

secondary librarians to be able to recognize a student who has missed some of the earlier phonetic literacy steps and needs help.

In all, these results suggest that by creating coherence between the subject matter and participant work experiences, students became more receptive to the instructional content (and experienced increased LA). As students experienced gains in LA, there was a positive effect in that students learned more from the course content as well as from other students via the discussion boards. A reciprocal effect occurred by which students gained confidence in the LIR as a result of knowledge gains, leading to greater enthusiasm for the literacy strategies.

The net result of these gains in knowledge and perceptions was measured by the selective coding results, in which the researcher found that 11 of the 31 total participants exhibited an attitude shift regarding the move from TIR to embrace of LIR instructional goals (see Appendix D). Remarkably, a vast majority (7 out of the 11) of those making the big shift in perceptions were Secondary cohort participants. These findings reinforce the quantitative findings, which found that the Secondary cohort produced a slightly more pronounced positive shift in perceptions of the literacy instruction role by the end of instruction.

Summary

The results of the quantitative and qualitative data analysis indicate that the instructional intervention produced significant changes in participant

knowledge and perceptions of the literacy instructional role. Dependent-samples t-tests demonstrated that statistically significant gains in both knowledge and perceptions occurred on a class-wide basis. Despite the aggregated on-average gains, the repeated-measures ANOVA tests concluded that there was no statistically significant difference between the cohorts in either knowledge or perceptions gains. The qualitative analysis produced some context for these findings. It was determined that structural elements of the course delivery produced the collective participation and coherence aspects conducive to knowledge gains as well as perception changes. Another qualitative finding was that a predominance of secondary school librarians experienced a marked change in their perceptions of the literacy instruction role. The next chapter will discuss conclusions and recommendations for future study.

CHAPTER V

DISCUSSION

Overview

Although school librarian professional standards already mandate an instructional focus on reading comprehension strategies (AASL, 2007; AASL, 2009a, AASL, 2009b), federal legislation such as the Every Student Succeeds Act has renewed the need for school librarians to teach explicit strategies which support reading instruction. Unfortunately, Tennessee K-12 school librarians may be underprepared to meet this challenge: there currently exists a shortage of university instruction through state graduate-level librarian preparation programs to address the need for substantial literacy training in areas such as reading comprehension strategies. In addition to this lack of training, research exists which suggests that school librarians may not perceive this instructional focus to be a primary function of their jobs (Latham, Gross, & Witte, 2013; Will, 2016), and that this problem is more acute among secondary school librarians (Lea, 2013; McCoy, 2001; McCracken, 2001). This is a problem, as Tennessee will need the cooperation of all instructional staff in order to reach its ambitious student literacy goals.

This study sought to examine the use of a university-sponsored professional development as a possible remedy to the lack of school librarian training. The study's instructional intervention emphasized reading comprehension strategies which could be integrated into the school librarian's regular instruction. In seeking to understand the significance of this instruction to

possible changes on the knowledge and/or perceptions of the school librarian's literacy instruction role, the researcher also attempted to understand if group differences existed between elementary and secondary librarians.

Conclusions

The quantitative data analysis produced several determinations regarding the effectiveness of the instructional intervention. Both cohorts made statistically significant gains in knowledge as well as changes in perceptions; however there were no statistically significant differences between cohorts in their change of knowledge or perceptions. This finding suggests that the instructional intervention was an effective means of educating this particular group of school librarians on reading comprehension strategies. The instruction was also effective in improving participant perceptions regarding the literacy instruction role.

Improving knowledge is an important finding, as increased pedagogical knowledge would hopefully lead to higher quality instruction and increased academic performance in students. Although reading success is critical at the elementary level, it is just as vital at the secondary level where reading skills are required to master content area courses (e.g., science). Librarians who can perform not only the conventional skills of materials selection and information literacy instruction, but who also have the knowledge base by which to teach reading, would be an invaluable asset to their schools. Such professionals could help supplement reading instruction, particularly for struggling readers. The

literature indicates that many librarians are already being called upon to perform this level of instruction through Rtl assistance (Robins & Antrim, 2012); therefore university programs would be well-advised to take proactive measures to bridge the librarian knowledge gap. The pre-posttest knowledge gains are encouraging in that participants on average increased their knowledge; these knowledge gains would hopefully lead to improvements in student literacy.

Librarian perceptions of the literacy instruction role are equally important: if the study had simply increased participant knowledge, the intervention would have overlooked an important factor affecting future implementation of the strategies in the classroom. School librarians who believe in these strategies will be more likely to take the time to implement them in their teaching. In addition to a belief in the value of these strategies to their students, librarians must also consider this instruction part of their regular job duties, and therefore not begrudge the literacy instruction role as yet another task heaped onto their workload. Professional development can remedy possible resentment: when presented with the federal and professional mandates for inclusion of these tasks, many librarians will accept this type of instruction as being a normal part of their jobs.

The lack of a main effect for cohort and the interaction findings in both knowledge and perception indicate that there was no statistical difference between cohorts and no differential impact of treatment between the groups; however, from a practical standpoint, secondary teachers saw greater increases in both. Environmental aspects, including job duties, may have played some role

in this finding. As compared to secondary school librarians, elementary librarians work in an environment in which literacy goals are at the forefront of many school improvement plans. These librarians' experiences in supporting classroom teachers, making materials selections, participating on school committees and otherwise contributing to literacy goals may have prepared them with a higher level of background knowledge of the subject matter prior to the instructional intervention.

Closely related to this difference in knowledge base as a result of environment are the differences in perceptions. In contrast to elementary librarians, secondary school librarians put a higher emphasis on the role of technology support than that of instruction (Lea, 2013; McCoy, 2001; McCracken, 2001). Secondary school librarians are frequently called upon to implement and troubleshoot technology at higher rates than elementary teachers; furthermore this is an expectation often put into place by their colleagues (McCoy, 2001). There are therefore environmental differences which may have contributed to secondary librarians entering the instructional intervention with lower knowledge and perceptions of the literacy instruction role.

While it was important to find out that there were participant knowledge and perception gains post-instruction, it was just as meaningful to understand how the instruction facilitated change. The qualitative data analysis was therefore necessary to understand which components of the training were most conducive to the librarian gains, as well as the manner by which these components

promoted change. Several themes emerged from the analysis which largely supported prior research.

The first theme was that a PD delivered over a period of weeks, using an online course delivery system, proved to be an effective means of educating this group of school librarians. The six-week course structuring of this study's instructional intervention promoted meaningful analysis of the content by participants rather than simply a cursory look at the concepts. This finding supports the prior work of Mundy, Howe, and Kupczynski (2015), who found that the weekly instructional format afforded by a university course was a more effective means of achieving long-term instructional gains for teachers as compared to the one-day teacher in-service format referred to as a "one-shot". The online, self-paced format of this study's intervention may have also promoted librarian gains. This finding is similar to a 2010 study by Graves et al. in which the use of technology to deliver a self-paced reading strategies PD, rather than in-person instruction, achieved significant effects for participant learning.

Two other factors in the design of this study's instructional intervention support prior studies on effective teacher PD. The qualitative analysis found that the use of collective participation and coherence were critical to securing librarian acceptance of the literacy instruction role. These practices were previously documented by Garet et al. (2001) as being two of the most important components in educator PD which produced statistically significant effects on teacher knowledge gains. The use of collective participation created a welcoming learning environment in which participants felt empowered to offer opinions and

ask for help. Participants benefited from the exchange of knowledge with colleagues working at the same instructional level, and their shared experiences fostered camaraderie. This collaborative learning environment facilitated learning gains, leading to greater confidence among participants regarding the practical implementation of the reading comprehension strategies. Coherence was used in making the instructional content relevant to the professional work of the participants. Participants realized that these literacy strategies were feasible in the context of their instruction, leading to greater enthusiasm for the literacy instruction role. Coherence also helped by activating participant background knowledge, both from their work experiences as well as their prior knowledge of reading comprehension strategies. In some cases, participants had already used a few of the strategies in their teaching without their realization that these were in fact literacy strategies. Coherence was very important to librarian acceptance of the literacy instruction role: as evidenced by the qualitative data, it was largely responsible for increases in Literacy Attitudes (LA), a prerequisite to heightened Literacy Instruction Role (LIR).

Although the quantitative assessment found a statistically significant change in perceptions among both cohorts, the qualitative results produced a more detailed picture. The results of the qualitative analysis found that 11 of the 31 participants made a substantial change in their perceptions of the literacy instruction role, moving away from a defined traditional librarian role to that of a literacy instruction leader. This change predominantly occurred among secondary school practitioners. Elementary librarians came into the course with a

greater prior awareness of the literacy instruction role, as judged by the qualitative data gleaned from their initial application essays; therefore these participants had less of a dramatic shift to make in their perceptions. The results are therefore very encouraging, since secondary librarians typically do not view literacy instruction as a priority (Lea, 2013; McCoy, 2001; McCracken, 2001). It would seem that coherence in particular may have played a role in this shift in secondary librarian perceptions. Their writings often displayed their preconceptions regarding secondary student literacy ability. The intervention was able to connect the instructional strategies to their individual students, to show that these were relevant and age-appropriate techniques for a wide variety of ability levels.

In all, it is clear that a structured instructional program on reading comprehension can be beneficial to experienced school librarians. This training led the members of both cohorts to understand that reading strategies instruction is both an achievable and necessary aspect of library instruction that should not be ignored in favor of information literacy skills. Although it would be preferable for Tennessee graduate-level librarian preparation programs to address these strategies through their coursework, professional development affords the opportunity to further educate practicing school librarians. Professional development can bridge the knowledge gaps, as well as facilitate the change in perceptions required to motivate librarians to embrace the literacy instruction role. Both of these components are necessary: we can instruct librarians on

these strategies, but without a change in perceptions they may not fully accept nor implement the literacy instruction role.

Limitations

This study was limited by several aspects of the participant sample. With thirty-one total students completing the instruction and assessments, this sample size limits the ability to generalize the effects of this study to a larger population. Another limitation of the sample was the absence of a traditional control group. Randomization of participants was also not possible, as participants were purposely assigned to a cohort group based upon their prior teaching experience. Selection bias is a possibility due to the volunteer basis of recruitment; these volunteers inherently exhibit a level of self-motivation that may not be representative of their profession. The strict inclusion criteria for the study presents another factor in selection bias as it suggests generalization of the study's results to only licensed and experienced Tennessee school librarians. In all, these additional prevent the generalization of the study's results to a larger population.

Recommendations for Future Research

Several findings from this research indicate the need for future studies. One area of concern is in regard to the long-term retention of the instructional content. Several researchers (Amendum, 2014; Jacob, 2017) have documented the need for additional supports after the conclusion of a professional

development so as to promote retention of the training as well as integration of the training into the teacher's pedagogy. In keeping with this practice, several actions were taken in the design of this study's intervention to provide additional assistance to participants upon the conclusion of instruction. Participants were provided with a course textbook and long-term access to the online course content as possible future reference sources. Another support was the creation of an online depository of lesson plans generated as part of the class; these were intended as an ongoing resource for the participants. It would be helpful to conduct a follow-up study in order to determine retention levels of the subject matter as well as participant integration of the literacy strategies into their instruction. Perhaps additional ideas for librarian supports could be generated from such research.

Another research interest is in regard to possible barriers of implementation of the study's reading comprehension strategies. The qualitative results indicated that despite their knowledge and perceptions gains, some librarians felt that they may not be able to fully implement their literacy instruction role due to perceived barriers in their workplaces. A follow-up study would be to examine administrator and classroom teacher perceptions of the school librarian's literacy instruction role, and document the extent of barriers such as lack of classroom teacher willingness to collaborate or limits placed by school principals. If barriers exist, additional professional development for all stakeholders could possibly be developed to help librarians overcome these problems.

And finally, a third area of inquiry is in regard to K-12 student performance as a result of school librarian training. It would be very important to determine whether school librarian knowledge gains in the area of reading comprehension instructional strategies would lead to increases in student literacy. A study that examined the relationship between librarian knowledge gains and student performance could be extended to see if these gains generalize to student achievement in content area courses.

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APPENDICES

APPENDIX A: SCHOOL LIBRARIAN PERCEPTIONS AND KNOWLEDGE SURVEY

School Librarian Perceptions and Knowledge Survey

School Librarian Perceptions of the Literacy Instruction Role

The following 15 statements relate to your opinions of the literacy instruction role of K-12 school librarians. Select the response that best corresponds to what degree you agree with each statement.

RESPONSE KEY	
SA = Strongly Agree	MD = Mildly Disagree
A = Agree	D = Disagree
MA = Mildly Agree	SD = Strongly Disagree

1. I define the term "literacy" as a person's knowledge of a particular subject or skill; for example "information literacy".	SA A MA MD D SD
2. Every educator is a reading instructor.	SA A MA MD D SD
3. I regularly collaborate with classroom teachers on joint lessons to support information literacy standards, for example research skills.	SA A MA MD D SD
4. Increasing reading proficiency levels in students should be the main instructional focus in elementary schools.	SA A MA MD D SD
5. I have the ability and training necessary to motivate my students to read.	SA A MA MD D SD
6. Reading proficiency levels in children are the single most important factor in how well they do in school.	SA A MA MD D SD

School Librarian Perceptions and Knowledge Survey

7. I consider the teaching of information literacy (the ability to locate, evaluate, and use information resources) to be a major responsibility of my job.	SA A MA MD D SD
8. I regularly collaborate with classroom teachers on joint lessons which include reading comprehension strategies.	SA A MA MD D SD
9. My training and coursework during my librarian preparation gave me the skills to effectively teach reading strategies.	SA A MA MD D SD
10. I define the term "literacy" as the ability to read with at least a minimum level of proficiency.	SA A MA MD D SD
11. Increasing reading proficiency levels in students should be the main instructional focus in secondary (middle and high) schools.	SA A MA MD D SD
12. I consider the teaching and support of reading strategies to be a major responsibility of my job.	SA A MA MD D SD
13. My administrator values my role in supporting student reading achievement objectives.	SA A MA MD D SD
14. I am treated as an equal by classroom teachers when it comes to the planning and design of lessons which support school reading achievement goals.	SA A MA MD D SD

School Librarian Perceptions and Knowledge Survey

15. I incorporate reading comprehension skills within my lessons.	SA A MA MD D SD
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*School Librarian Perceptions and Knowledge Survey*School Librarian Knowledge of the Literacy Instruction Role

Please complete the following 15 questions, which demonstrate an overview of the concepts that will be covered in this course.

1. Which of the following would most be considered a “During” comprehension strategy?

- a. Summarize
- b. Activate background knowledge
- c. Reflection
- d. Clarifying purpose for reading
- e. Determining main idea

2. Under which federal educational policy are school librarians mandated a level of literacy instruction collaboration with classroom teachers (including funding for professional development opportunities)?

- a. No Child Left Behind (NCLB)
- b. Every Student Succeeds Act (ESSA)
- c. Elementary and Special Education Act (ESEA)
- d. Individuals with Disabilities Education Act (IDEA)
- e. Response to Intervention (RTI)

3. Which one of the following was NOT endorsed by the National Reading Panel as a successful evidence-based reading instruction practice?

- a. Phonemic awareness
- b. Reading comprehension
- c. Silent sustained reading (SSR)
- d. Fluency
- e. Guided oral reading

School Librarian Perceptions and Knowledge Survey

<p>4. Which one of the following refers to a strategy in which learners make connections between their background knowledge and any meaningful written communication?</p> <ul style="list-style-type: none">a. Text-to-selfb. Text-to-worldc. Text-to-memoryd. Text-to-texte. Text-to-foundation
<p>5. The Construction-Integration model states that inferencing (beyond the explicit information present in the text) happens at which level:</p> <ul style="list-style-type: none">a. Surface structure levelb. Foundation levelc. Situation model leveld. Textbase levele. Automatic model level
<p>6. One advantage of the _____ model of reading comprehension is that it provides an explanation for individual differences in comprehension skill.</p> <ul style="list-style-type: none">a. Structure-Building modelb. Event-Indexing modelc. Construction-Integration modeld. Psycholinguistic modele. Social Development model
<p>7. Which theory of reading comprehension best supports the processes behind understanding narrative text?</p> <ul style="list-style-type: none">a. Structure-Building modelb. Event-Indexing modelc. Construction-Integration modeld. Psycholinguistic modele. Social Development model

School Librarian Perceptions and Knowledge Survey

8. The Structure-Building model states that when comprehenders cannot map to a structure, then a substructure is built, which in turn requires laying another foundation. This process is called _____.

- a. shifting
- b. differentiation
- c. priming
- d. directing
- e. structuring

9. Which of the following is NOT a metacognition strategy?

- a. Activating background knowledge
- b. Using graphic organizers
- c. Using context clues
- d. Making predictions
- e. Defining unknown vocabulary words

10. Which of the following reading comprehension strategies best aligns with *Standards for the 21st-Century Learner*, standard 4.1.2: "Read widely and fluently to make connections with self, the world, and previous reading."

- a. Using sensory images
- b. Questioning
- c. Making predictions
- d. Determining main ideas
- e. Activating or building background knowledge

11. The Structure-Building model proposes that readers _____ information that is related to prior knowledge and _____ information that appears irrelevant.

- a. Gather; inhibit
- b. Support; synthesize
- c. Store; add
- d. Enhance; suppress
- e. Modify; reduce

School Librarian Perceptions and Knowledge Survey

<p>12. _____ is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language.</p> <ul style="list-style-type: none">a. Literacyb. Metacognitionc. Language developmentd. Reading comprehensione. Communication
<p>13. Which of the following is NOT a type of inferencing classified under the Construction Integration model?</p> <ul style="list-style-type: none">a. Generatedb. Retrievedc. Automaticd. Controllede. Enhanced
<p>14. One coteaching approach in which each educator works with half the class to teach the same or similar content is _____.</p> <ul style="list-style-type: none">a. Parallel teachingb. One teaching, one supportingc. Station or center teachingd. Alternative teachinge. Team teaching
<p>15. Effective reading comprehension strategy instruction should be explicit. Which of the following steps is NOT an example of explicit instruction?</p> <ul style="list-style-type: none">a. Explanationb. Modelingc. Guided practiced. Memorizatione. Application

APPENDIX B: COURSE SYLLABUS



SYLLABUS

Course name: "LEADERSHIP IN LITERACY INSTRUCTION"
Semester: Summer 2017

A Professional Development course for practicing school librarians
made possible through a 2016-2017 MTSU Public Service Grant,
as well as support from
MTSU's Walker Library, College of Education, and Department of Educational Leadership.

Class web sites are in Canvas:

Elementary cohort: <https://canvas.instructure.com/courses/1156608>

Secondary cohort: <https://canvas.instructure.com/courses/1140149>

Instructor: Karen N. Reed
Office Location: MTSU's Walker Library, room 386
Office Phone: (615) 494-8641
Email: karen.reed@mtsu.edu

Class dates:

This is an online class. Each week's content will begin on Mondays, following the schedule below:

- June 5
- June 12
- June 19
- June 26
- July 10
- July 17

Course Information:

This course is an overview of evidence-based reading comprehension strategies, with specific application to the work of school librarians.

Learning Outcomes:

Upon completion of this course, students will be able to:

- a. Differentiate between basic tenets of two models of reading comprehension: Kintch's Construction-Integration (CI) model and Gernsbacher's Structure-Building Model.
- b. Articulate the rationale for including reading comprehension instruction as part of the school librarian's workload.
- c. Apply to their school librarian instruction the specific reading comprehension strategies of (1) activating/building prior knowledge, (2) using sensory images, (3) questioning, (4) making predictions and inferences, and (5) determining main ideas.

ALA/AASL Standards for Initial Preparation of School Librarians (2010)Standard 1: Teaching for Learning

1.2 Candidates implement the principles of effective teaching and learning that contribute to an active, inquiry-based approach to learning. Candidates make use of a variety of instructional strategies and assessment tools to design and develop digital-age learning experiences and assessments in partnership with classroom teachers and other educators. Candidates can document and communicate the impact of collaborative instruction on student achievement.

1.3 Candidates model, share, and promote effective principles of teaching and learning as collaborative partners with other educators. Candidates acknowledge the importance of participating in curriculum development, of engaging in school improvement processes, and of offering professional development to other educators as it relates to library and information use.

Standard 2: Literacy and Reading

2.4 Candidates collaborate with classroom teachers to reinforce a wide variety of reading instructional strategies to ensure P-12 students are able to create meaning from text.

Standard 3: Advocacy and Leadership

4.2 Candidates model a strong commitment to the profession by participating in professional growth and leadership opportunities through membership in library associations, attendance at professional conferences, reading professional publications, and exploring Internet resources. Candidates plan for ongoing professional growth.

4.3 Candidates are able to articulate the role and relationship of the school library program's impact on student academic achievement within the context of current educational initiatives. Utilizing evidence-based practice and information from education and library research, candidates communicate ways in which the library program can enhance school improvement efforts.

Textbook:

1) Depending on your assigned cohort, you will receive one of the following:

- Moreillon, J. (2013). *Coteaching reading comprehension strategies in elementary school libraries: Maximizing your impact*. Chicago: American Library Association.
- Moreillon, J. (2012). *Coteaching reading comprehension strategies in secondary school libraries: Maximizing your impact*. Chicago: American Library Association.

2) In addition to your textbook, you will also need to access the accompanying web materials for each textbook:

- *Coteaching reading comprehension strategies in elementary school libraries: Maximizing your impact*.
<http://www.alaeditions.org/web-extra-coteaching-reading-comprehension-strategies-elementary-school-libraries>
- *Coteaching reading comprehension strategies in secondary school libraries: Maximizing your impact*.
<http://www.alaeditions.org/web-extra-coteaching-reading-comprehension-strategies-secondary-school-libraries>

Weekly Content:

Week #	Date	Theme	Activities	Assignments Due
1	June 5-11	What is literacy instruction leadership?	<ul style="list-style-type: none"> • Video clip 1: Why literacy? • Video clip 2: Federal & professional mandates • Video clip 3: Fundamentals of Lit. Acquisition (Early Literacy Skills) 	<ul style="list-style-type: none"> • Completion of 2 pre-instruction checks (Perceptions and Knowledge), both due by June 5 • Group discussion boards: Due 6/11
2	June 12-18	Strategy #1: Activating/Building Background Knowledge	<ul style="list-style-type: none"> • Read Moreillon, Chpt. 3 • Video clip 4: Fundamentals of Lit. Acquisition (The Simple View of Reading) • Video clip 5: Theories of reading comprehension (Structure-Building model) 	<ul style="list-style-type: none"> • Group discussion boards: Due 6/18 • Group problem-solving task: Use Twiddla for an interactive whiteboard to complete group matrix. Due 6/18
3	June 19-25	Strategy #2: Using Sensory Images	<ul style="list-style-type: none"> • Read Moreillon, Chpt. 4 	<ul style="list-style-type: none"> • Group discussion boards: Due 6/25 • Group problem-solving task: use Canva to create an online poster. Due 6/25
4	June 26- July 3	Strategy #3: Questioning	<ul style="list-style-type: none"> • Read Moreillon, Chpt. 5 	<ul style="list-style-type: none"> • Group discussion boards: Due 7/3 • Group problem-solving task: Use Google Docs to fill in QAR matrix. Due 7/3
<i>(no class week of July 4 - 9)</i>				
5	July 10-16	Strategy #4, Making Predictions and Inferences	<ul style="list-style-type: none"> • Read Moreillon, Chpt. 6 • Video clip 6: Theories of reading comprehension (Construction-Integration) 	<ul style="list-style-type: none"> • Group discussion boards: Due 7/16 • Group problem-solving task: Use stripgenerator.com to make a prediction storyboard. Due 7/16

6	July 17-23	Strategy #5, Determining Main Ideas	<ul style="list-style-type: none"> • Read Moreillon, Chpt. 7 	<ul style="list-style-type: none"> • Group discussion boards: Due 7/23 • "Choose Your Own Adventure" lesson plan, due 7/23 • Completion of post-instruction check, due 7/24
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Description of Assignments:

1. Pre-instruction check & post-instruction check

Students are asked to complete two short surveys before beginning and after completing the course. This summer session is the first offering of this instructional content, and I would like to improve both our content and delivery for the next group! Gathering this data will help me adjust instruction accordingly as well as find areas of future course improvement. Please answer the two surveys in their entirety.

2. Group discussion boards

Group discussion boards are organized by each assigned group. Although everyone will be posed the same question each week, individuals will post their responses only within their assigned group's area. Each week participants are expected to post at a minimum: one original post (giving your thoughts on the topic), as well as one reply post (responding to a group member's post). Group discussion boards are intended as a collaborative area in which to engage with other energized members of your profession; therefore please give some thought to your postings and also observe the Course Netiquette.

Topics:

- Week 1: Post your individual introduction. Let your group know a little about yourself, and get to know the others in your group. Also work together to decide on a group name! Please complete all postings, including a report of your group's name in a post by June 11.
- Week 2: This week's reading addresses the activation/building of background knowledge, and explains the 3 connection types of text-to-self, text-to-text, and text-to-world. For this week's post, please discuss an experience you have had in utilizing this strategy in your library, or if you haven't used this one yet then please give an example of

how you might use this strategy in the future. Post on this topic (including giving a response to one group member's post) by June 18.

- Week 3: Sensory images are a powerful trigger of background information. For this week's posting, describe practical ideas you have for stimulating your students' recall of background information through sensory images. What are your students into right now, or what might really get them thinking? Is there a way to incorporate sensory imagery this way? Let your creative juices flow as you post on this topic, and don't forget to respond to a group member, by June 25.
- Week 4: This week's reading in the Moreillon book covers the instructional strategy of Questioning. As you've probably experienced, questioning can be more complicated than perhaps appears at first glance, as there are many good techniques. Moreillon gives a lot of treatment to the use of QAR matrices, and this week's group problem-solving task will reinforce that instructional technique.

But for this week's class-wide discussion, I'd like you to look over an additional reading from *Knowledge Quest* which Moreillon references in the secondary cohort's book. In the attached reading, author Jamie McKenzie gives a concrete example of using mind-mapping as a way to facilitate student questions and inquiry into a research topic. Although the article appears to discuss a lesson at the secondary level, the technique of mind-mapping definitely applies at the elementary level as well.

What strategies have you used to facilitate questioning with your students? How do you see QAR matrices or mind-mapping working in your instruction? What pitfalls do you foresee, and how could you work around them? Does anything in McKenzie's article jump out at you? Please discuss any or all of these topics with your classmates! Post by July 3.

- Week 5: Let's revisit our discussion of the Structure-Building model as well as consider the Construction-Integration model in thinking about this reading on predicting and inferring. As you read chapter 6, which model most resonates with you in explaining this strategy? And why? Please post your thoughts by July 16.
- Week 6: This week you will post the beginnings of a lesson plan utilizing the Determining Main Idea strategy. Select a website appropriate to the children you serve, and then select one of the chapter 7 online resources (see the URL for your textbook above under the Textbooks section). Explain how you would lead your students to determine some of

the main idea questions from Chapter 7 in the context of your website. Be sure to give the correct URL for the website in your online post; also explain how the online resource you selected will figure into this lesson. Please post by July 23.

3. Group problem-solving tasks

Group problem-solving tasks give you an opportunity to apply the week's readings through the use of a technology product. By the end of the course, you will hopefully leave with some new additions to your librarian techie toolkit! You will be given specific instructions for each task, for which you will work together to produce one group deliverable.

- **Week 1:** (no group problem-solving assignment this week, only discussion posts)
- **Week 2:** Use Twiddla for an interactive whiteboard to complete a group matrix.
- **Week 3:** Use Canva to create a sensory images poster.
- **Week 4:** Use Google Docs to fill in a QAR matrix.
- **Week 5:** Use stripgenerator.com to make a prediction storyboard.
- **Week 6:** (no group problem-solving assignment this week, only discussion posts)

4. "Choose Your Own Adventure" lesson plan *(Due July 24)*

This course is intended to be a support for what you do everyday in your library, therefore this final deliverable should be something you can directly use when you get back to school this fall. Think back over the content this summer and see if any reading comprehension strategy really resonated with you; then, choose your own adventure! Write a lesson plan that aligns with one (or even more) of the strategies, in the context of a grade level that you teach. A rubric with specific lesson requirements will be posted in the assignment dropbox. These lesson plans will be shared with your classmates in a centralized online folder after the conclusion of the course, unless you specifically email the instructor and ask that your lesson not be shared.

Assessment and Grading:

Students who satisfactorily complete all requirements for this course can earn up to 2.0 Continuing Education Units (CEUs) or 20 Continuing Professional Education (CPE) contact hours. Completion of individual course requirements will be documented by the

instructor and submitted to MTSU's office of professional development, within MTSU's University College, in order to issue these credits to the individual students.

Grades for individual assignments will be based on the quality of your work, as well as how well your work masters the goals of the assignment. Student work that indicates extra effort and time needs to be recognized: if 100% is given for simply completing an assignment, recognition for excellence cannot be provided! Therefore simple completion of an assignment does not guarantee 100% of the points available for an assignment. A grade of 100% will be assigned to work in which you demonstrate that you have really delved into the assignment.

Grading Scale & Policy:

At the end of the course, the points will be totaled and a percentage will be calculated. Grades are rounded up or down to a whole percent.

2.0 CEUs = 98-100%

1.9 CEUs = 93-97%

1.8 CEUs = 88-92%

1.7 CEUs = 83-87%

Assignments and Participation:

Total points possible: 1000

- Completion of pre-assessment check -- 250 points
- Group Discussion postings (answer to weekly questions from the readings) -- 150 points (25 points weekly)
- Group problem-solving posting (answer to a weekly challenge) -- 100 points (25 points weekly)
- Lesson planning assignment: "Choose your own adventure!" -- 250 points
- Completion of post-assessment check -- 250 points

Punctuality:

Due dates are set in order to allow you to pace the workload. **Late assignments are not accepted**, so if you miss a deadline, you should move on to the next assignment.

Course Ground Rules:

- Participation is required,
- Complete assignments on time,
- You are expected to communicate with other students on group projects,
- Keep abreast of course announcements,
- Observe course netiquette at all times.

Course Netiquette:

- Try to maintain threads by using the "Reply" button rather than starting a new topic.
- Do not make insulting or inflammatory statements to other member of the discussion group. Be respectful of others' ideas.
- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.
- Do not post your response as an attachment.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails.
- Respect the privacy of other class members.

Syllabus Changes

The instructor reserves the right to make changes as needed to this syllabus. If changes are necessary during the term of the course, the instructor will immediately notify students of such changes by posting the nature of the change on the course website under the Announcements tab.

APPENDIX C: QUALITATIVE DATA CODING MATRIX

Qualitative Data Coding Matrix for Librarian Perceptions

Research question: How will participants experience a change in their knowledge and perceptions regarding the literacy instruction role of the school librarian as a result of the instructional intervention?

1) Divided questions from the Perceptions section of the survey instrument into 5 coding categories:

- LITERACY INSTRUCTION ROLE (LIR) (*green*)

= the school librarian's view regarding their responsibility to teach literacy skills.

1. I define the term "literacy" as the ability to read with at least a minimum level of proficiency.
2. I consider the teaching and support of reading strategies to be a major responsibility of my job.
3. I regularly collaborate with classroom teachers on joint lessons which include reading comprehension strategies.
4. I incorporate reading comprehension skills within my lessons.

- LITERACY ATTITUDES (LA) (*purple*)

= the school librarian's buy-in regarding the importance of literacy instruction.

1. Increasing reading proficiency levels in students should be the main instructional focus in elementary schools.
2. Every educator is a reading instructor.
3. Reading proficiency levels in children are the single most important factor in how well they do in school.
4. Increasing reading proficiency levels in students should be the main instructional focus in secondary (middle and high) schools.

- TRADITIONAL INSTRUCTION ROLE (TIR) (*red*)

= speaks to the traditional librarian role of information literacy instruction (i.e. research skills)

1. I regularly collaborate with classroom teachers on joint lessons to support information literacy standards, for example research skills.
2. I consider the teaching of information literacy (the ability to locate, evaluate, and use information resources) to be a major responsibility of my job.
3. I define the term “literacy” as a person’s knowledge of a particular subject or skill; for example “information literacy”.

- CONFIDENCE (CON) (*blue*)

= the school librarian’s confidence in the workplace: how they view their skills, the importance of their role to the overall school goals, and how they think colleagues view their role.

1. My training and coursework during my librarian preparation gave me the skills to effectively teach reading strategies.
2. I have the ability and training necessary to motivate my students to read.
3. My administrator values my role in supporting student reading achievement objectives.
4. I am treated as an equal by classroom teachers when it comes to the planning and design of lessons which support school reading achievement goals.

2) Created 3 additional codes:

- Collaboration (COL) (*orange*) = school librarians’ ability to collaborate with their colleagues.
- Prior work experience (PWE) (*yellow*) = prior work experiences which have some bearing on literacy instruction.
- Prior education (PE) (*pink*) = prior education of school librarians regarding literacy instruction.

APPENDIX D: RESULTS OF SELECTIVE CODING

Student ID	Cohort	Selective coding characteristics
Student 1	Secondary	B
Student 10	Secondary	A, C
Student 11	Secondary	A, C
Student 13	Secondary	A, D
Student 14	Elementary	A, C
Student 15	Elementary	A, D
Student 17	Elementary	B
Student 18	Elementary	A
Student 19	Elementary	B
Student 2	Elementary	A, C
Student 20	Secondary	A, C, D , E
Student 21	Secondary	A, B, D
Student 22	Elementary	B, E
Student 23	Elementary	B, E
Student 24	Secondary	A, D
Student 25	Secondary	A, B
Student 26	Elementary	B
Student 27	Secondary	A
Student 28	Elementary	A, C, D , E

Student 29	Secondary	A, C, D , E
Student 3	Elementary	B
Student 30	Elementary	D , E
Student 31	Secondary	B, E
Student 33	Secondary	A, B, D , E
Student 34	Secondary	A, B
Student 35	Elementary	C, D , E
Student 4	Secondary	A, B
Student 5	Elementary	A, B
Student 6	Secondary	D , E
Student 7	Elementary	A, E
Student 9	Secondary	A, B

*Selective coding key **D** represents a significant attitude shift regarding the literacy instruction role (N = 11 total: 7 Secondary, 4 Elementary).*

APPENDIX E: IRB EXPEDITED PROTOCOL APPROVAL NOTICE

IRB
INSTITUTIONAL REVIEW BOARD
 Office of Research Compliance,
 010A Sam Ingram Building,
 2269 Middle Tennessee Blvd
 Murfreesboro, TN 37129



IRBN001 - EXPEDITED PROTOCOL APPROVAL NOTICE

Tuesday, May 23, 2017

Principal Investigator **Karen N. Reed** (Student)
 Faculty Advisor Eric Oslund
 Co-Investigators NONE
 Investigator Email(s) *karen.reed@mtsu.edu; eric.oslund@mtsu.edu*
 Department Department of Elementary and Special Education

Protocol Title ***Empowering school librarians to be literacy instruction leaders through professional development***
 Protocol ID **17-2248**

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXPEDITED** mechanism under 45 CFR 46.110 and 21 CFR 56.110 within the category (7) *Research on individual or group characteristics or behavior*. A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action	APPROVED for one year from the date of this notification
Date of expiration	5/31/2018
Participant Size	40 (FORTY)
Participant Pool	Adult individuals who are practicing K-12 school librarians
Exceptions	1. Permitted to recruit participants from the professional development program to be organized by the principal investigator. 2. Collection of identifiable information to facilitate the project is permitted and identifiable data must not be used or reported in the research segment of the study. 3. Informed consent over email is permitted
Restrictions	Mandatory informed consent (administered via email).
Comments	The PI is also a faculty at MTSU

This protocol can be continued for up to THREE years (**5/31/2020**) by obtaining a continuation approval prior to **5/31/2018**. Refer to the following schedule to plan your annual project reports and be aware that you may not receive a separate reminder to complete your continuing reviews. Failure in obtaining an approval for continuation will automatically result in cancellation of this protocol. Moreover, the completion of this study MUST be notified to the Office of Compliance by filing a final report in order to close-out the protocol.

Institutional Review Board

Office of Compliance

Middle Tennessee State University

Continuing Review Schedule:

Reporting Period	Requisition Deadline	IRB Comments
First year report	4/30/2018	TO BE COMPLETED
Second year report	4/30/2019	TO BE COMPLETED
Final report	4/30/2020	TO BE COMPLETED

Post-approval Protocol Amendments:

Date	Amendment(s)	IRB Comments
NONE	NONE	NONE

The investigator(s) indicated in this notification should read and abide by all of the post-approval conditions imposed with this approval. [Refer to the post-approval guidelines posted in the MTSU IRB's website](#). Any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918 within 48 hours of the incident. Amendments to this protocol must be approved by the IRB. Inclusion of new researchers must also be approved by the Office of Compliance before they begin to work on the project.

All of the research-related records, which include signed consent forms, investigator information and other documents related to the study, must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data storage must be maintained for at least three (3) years after study completion. Subsequently, the researcher may destroy the data in a manner that maintains confidentiality and anonymity. IRB reserves the right to modify, change or cancel the terms of this letter without prior notice. Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board
Middle Tennessee State University

Quick Links:

[Click here](#) for a detailed list of the post-approval responsibilities.
More information on expedited procedures can be found [here](#).

APPENDIX F: VITA

Karen Nourse Reed received a Bachelor of Arts degree from James Madison University in Harrisonburg, Virginia in 1995. She received a Post-Baccalaureate Certificate in Information Systems from Virginia Commonwealth University in Richmond, Virginia in 1998, and subsequently began her career as a computer programmer with Electronic Data Systems. She later transitioned to software testing work within the banking industry in Charlotte, North Carolina.

The experience of working in software development and testing provided a valuable foundation to understanding the organization and retrieval of information. In 2006, Ms. Reed graduated from the University of North Carolina at Greensboro with a Master of Library and Information Studies degree. She moved to southwestern Virginia and worked as a middle school librarian from 2008 to 2013 for Franklin County (Virginia) Public Schools. She completed a Master of Science in Education degree from Radford University in Radford, Virginia in 2010.

In the fall of 2013, Ms. Reed began a tenure-track position with Middle Tennessee State University as the Education Librarian; at this time, she also began the university's doctoral program in Literacy Studies. Ms. Reed has published articles on a range of library science topics in such peer-reviewed publications as *Practical Academic Librarianship*, *The Reading Room: A Journal of Special Collections*, and *Tennessee Libraries*.