

“Whose job is it anyway?”: Secondary English Language Arts teachers’ literacy-centered professional development in rural, suburban, and urban contexts.

by

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B.A., Washburn University, 2013
M.A., Kansas State University, 2021

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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Abstract

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The data for this dissertation research was collected under a grant-funded research project to improve literacy outcomes in Kansas, with a long-term goal of creating resources for Kansas educators to better support literacy practices and to describe the landscape of literacy education in the state of Kansas. My own dissertation research draws from this larger dataset conducted in this grant work. I used a convergent, parallel mixed-method approach (Creswell, 2014; Castro et al., 2010). My data included 11 closed-ended Likert questions asking teachers about their feelings of self-efficacy regarding literacy topics. This data also included one-open ended

qualitative survey question, as well as a follow-up interview with 11 participants further exploring teachers' experiences with literacy focused professional development.

The data was analyzed in several phases. First the closed-ended survey question was analyzed to look for variance among self-efficacy levels in teachers in rural, urban, and suburban settings (Creswell, 2014). Drawing on Braun and Clarke's (2022) six phases for Thematic Analysis, open and axial coding of the qualitative open-ended survey question and interview transcripts resulted in 6 categories, and 163 codes in the survey, and 6 categories and 104 codes in the interview. Finally, the qualitative codes were analyzed quantitatively to look for differences in code frequencies between the rural, urban, and suburban contexts (Johnson & Christensen, 2012).

Sociocultural Theory serves as my theoretical framework for analysis (Lewis et al., 2013; Vygotsky, 1978). I used two supplementary structural models to further analyze and contextual professional development experiences in different teaching contexts. I drew on a professional development framework (Darling-Hammond et al., 2017; Desimone, 2009; Guskey 2003; 2014), as well as Shanahan's (2005) National Reading Panel Report to discuss topics and quality of the professional development opportunities that teachers encounter. Results indicated that while PD is a universal experience across the state, rural teachers receive less frequent and less-focused PD than teachers in urban and suburban contexts. State-sponsored literacy measured supported equitable access to PD for all teaching contexts.

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Approved by:

Major Professor
Dr. Vicki Sherbert

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Dedication

To all of the English teachers, especially the ones holding the fort alone.

Chapter 1 - Introduction

Personal Story: A Literacy Connection

I remember the exact moment I learned to read. When I was 5 years old, my kindergarten teacher, Ms. Gardels, wrote the consonants in white chalk on the green chalkboard in one column and the vowels in the other. She explained how the consonant-vowel-consonant letter pattern blends to make a word. She showed us how each letter made a sound, and she told me if I said the sounds out loud, I would hear a word. The moment was so profound that it sticks in my mind 30 years later. The moment before that moment, I could not read and a moment later, I could. But I don't think everyone learns to read in one leap. I'm not sure I learned to read, so much as I had the concept of reading explained to me. In fact, I'm still not quite sure how people learn to read.

This not-quite-sure feeling sat in the back of my mind, gnawed at the pit of my stomach, and followed me through my teaching career. As I became a secondary English teacher, as a graduate student working on a M.A. in English with an emphasis in Children's Literature, and then as a Graduate Teaching Assistant working with pre-service secondary English teachers, I continued to carry this not-quite-sure feeling with me. I was so close to literacy, so literacy-adjacent, but I didn't really know how people learned to read. When I became a mother, I felt I had to address it. How could I teach literature to so many students, teach literacy pedagogy to so many pre-service teachers, and still feel like I couldn't teach someone to read? What would I do if my own child needed me to teach him to read? Where would I begin? Wanting to understand more about this topic, I enrolled in LETRS training, a two-year early literacy training program. As I make my way through the program, I'm still not confident I could teach someone to read, but I do have a better understanding of the basics.

As a secondary English teacher, I didn't think I was alone, and now that I have completed this dissertation, I know that I'm not. Secondary English teachers, teachers who work with students in the grades 6-12, are well equipped to take on topics such as theme, characterization, and plot. They dig into canonical literature such as *Romeo and Juliet*, *Frankenstein*, and *The Great Gatsby*. But the actual task of teaching someone to read is not part of a pre-service teacher preparation program, nor is it addressed in professional development opportunities for secondary English teachers. As I realized the number of my students who struggled with basic literacy skills, I did not feel equipped to address those needs. This dissertation is inspired by that struggle, by that not quite sure feeling. Like so many other English teachers, I just wanted to know where to begin.

Professional Development in Context: Purpose of Study

Literacy instruction has been part of both a critical and public conversation for the past 80 years as experts and lay people weigh in on how we should be teaching children to read (Thomas, 2022). "The Reading Wars," invokes imagery of battle: the clash of whole language vs phonics instruction. In 2018, the reading wars were re-ignited with Emily Hanford's article "Why Aren't Kids Being Taught to Read?" While criticism and conversation have centered early readers, secondary students also struggle with literacy and need support. Often left out of the conversation, secondary English teachers do not always feel prepared to offer this support (Lillge, 2019). Professional development and training offer one way for secondary English teachers to feel better prepared to address these issues. However, access to these opportunities can vary based on the resources and contexts within a school district, and teachers may find themselves seeking professional development opportunities on their own. The purpose of this study is to explore how in-service secondary English teachers describe their literacy related

professional development opportunities, barriers, and the impact of the professional development on their teaching praxis within rural, suburban, and urban contexts within the state of Kansas.

Overview of Issues

The Science of Reading

“The Reading Wars,” a longstanding American tradition of arguing over literacy instruction, are back. Shanahan (2005) writes, “The reading wars [is] an apt metaphor for the bitter debates over how to teach reading that [are] raging in the nation” (p.1). On one side of the debate are people who support whole-language instruction, and on the other side are people who support phonics forward instruction. While debating literacy instruction dates back at least 80 years (Thomas, 2022), the reading wars took off again most recently with Emily Hanford’s 2018 article, “Why Aren’t Kids Being Taught to Read?” (Foster et al., 2024). As a response to the reading wars, the Science of Reading gained in popularity. Foster et al. (2024) explain, “The Science of Reading is not a curriculum; nor is it simply an emphasis on phonics. It is a body of research from the cognitive, communication, development, psychological, and neurological sciences about how children learn to read and translate reading skills into other domains” (p.7). The Science of Reading emphasizes phonics, but it is also a strong response to a national concern with literacy, a concern predicated on the idea that national literacy scores are in dire straits. Compton-Lilly et al. (2023) argue that the Science of Reading, while playing out publicly in the media, exaggerates and misleads issues around literacy. It is a conversation that is hard to escape. Public scrutiny and a public conversation regarding literacy have real world effects, as policymakers take the conversation into consideration. Since 2013, 47 states and Washington DC have passed policies regarding the Science of Reading (Foster et al., 2024). The Science of Reading seems to be everywhere.

Teacher and Student Struggles

The concerns around literacy instruction are not unfounded. Foster et al. (2024) report that only 32% of fourth-grade students achieved reading proficiency in 2022. Turning to the most recent scores from NAEP, the Nation's Report Card, 31% of fourth graders scored at or above the proficient level, and 60% of fourth graders scored at or above the basic level on the 2024 reading assessment. At the eighth-grade level, 30% of students were at or above the proficient level, and 67% of students were at or above the basic level (NAEP, 2024).

The conversation around literacy is so gripping as the stakes could not be higher. Graham (2019) warns that students who do not learn to write well face academic, personal, and occupational challenges as they move through life. Writing instruction is so important because of the positive effect it has on students' abilities in other subjects (Graham, 2019). Without meaningful intervention, students who struggle with literacy in primary grades will continue to struggle in secondary grades. At the secondary level, students are reading to learn in their content area (Zhang & Smolen, 2022). Writing is an important component in college and career readiness (Arshan et al., 2024; Booth Olson et al., 2020; Booth Olson et al., 2023).

While students need literacy interventions, secondary teachers may not know where to begin. Thomas (2022) cites a 2021 overview of 27 studies on teacher preparation, which found that little is known about how beginning teachers are prepared to teach reading. In fact, many teachers do not feel prepared to give reading and writing instruction (Davis et al., 2018; Lillge, 2019; McMahan et al., 2019; Ray et al., 2024). Graham (2019), in a review of 28 studies, found that teachers did not spend enough time teaching writing. Professional development is one avenue for addressing these concerns.

Professional Development

Professional Development, which I will refer to as PD, is one avenue for in-service teachers to grow their knowledge and skill sets. Teachers attend and participate in PD to better understand how to address literacy issues. With increased training, teachers also increase their levels of knowledge (McMahan et al., 2019). In fact, strategy instruction is particularly helpful in improving student outcomes (Booth Olson et al., 2020; Booth Olson et al., 2023; Smit et al., 2022). Graham (2019) found that when teachers felt prepared to teach writing and felt more confident, they spent more time on writing instruction in the classroom. While we know that PD is an effective way to improve teacher knowledge, and therefore student outcomes, it is important that PD be conducted effectively. Graham (2019) suggests several ways to ensure a successful PD. Amongst other ideas, he suggests data collection before and after PD to help ensure training targets needs within the school and allows educators to know if the instruction is effective. Teachers should be trained using the curriculum and materials that will be used in the classroom. PD should be spread out over time, and schools should carve out dedicated time for professional development opportunities (Graham, 2019). Garet et al. (2001) advocates that certain professional development activities have a significant effect on teachers' knowledge and skills. He calls for PD to center on content knowledge; active learning; and a coherence with other learning activities (Garet et al., 2001). Similarly, Guskey (2014) outlines steps for effective professional development: "(1) student learning outcomes, (2) new practices to be implemented, (3) needed organizational support, (4) desired educator knowledge and skills, and (5) optimal professional learning activities" (p.3). By using effective professional development principles, the overall quality of the training increases.

While there are general frameworks for effective professional development, there is still a need to examine professional development within the context of literacy instruction for secondary English educators. Lillge (2019) explains that there is little research on applying professional development to writing instruction. Instructional coaching in high schools is a particularly under-researched area (Davis et al., 2018). We know that professional development varies widely in presentation and quality based on the school district it is offered in. More targeted research is needed on professional development literacy in secondary settings.

Teaching Contexts in Kansas

Teaching contexts in Kansas are vary widely between urban, suburban, and rural districts. There are 285 school districts in Kansas. The largest district, Wichita, serves 50,000 students. The next largest four districts in size, Olathe, Shawnee Mission, Blue Valley, and Kansas City, serve between 20,000-30,000 students. However, these districts are the outliers; 90% of school districts in Kansas serve fewer than 5,000 students, and a handful serve less than 100 students (KSDE, 2026). Each context has its own strengths, resources, and needs. However, one issue they have in common is that students in Kansas are struggling with literacy (NAEP, 2024). Since 2018, the Kansas legislature and the Board of Regents has introduced a variety of measures focusing on literacy and the science of reading to improve ELA state assessment scores in Kansas (Lane, 2026).

Statement of the Problem

Students at the secondary level struggle with literacy skills, just as students at the earliest stages of literacy do. Davis et al. (2018) write that when students enter high school below grade level, they need intense interventions to catch up with their peers. However, the current focus of research on literacy trends towards early literacy. While the societal conversation around literacy

and the reading wars include students of all ages, literacy research centers early literacy. In fact, secondary English teachers may not even see literacy intervention as their job (Davis et al., 2018), and they do not always see themselves as prepared to teach writing (Lillge, 2019).

Secondary Language Arts teachers need resources and training on literacy topics. Many teachers struggle implementing the interventions because they lack training (Davis et al., 2018; Ray et al., 2024). Education preparation programs, such as colleges and universities, tend to provide little literacy-focused support for secondary Language Arts teachers. Doubet and Southall (2018) found that targeted professional developments for secondary English teachers would support them in integrating reading and writing, which would be a better practice for literacy instruction. McMaster et al. (2020) found that secondary teachers need support to successfully implement the type of interventions struggling secondary students need.

Many professional development opportunities are selected for teachers by the school district, and the topic and quality are dependent on decisions and resources related to those school districts. Therefore, the quality of professional development can vary. For example, Henderson et al. (2018) argue the best practices for collaboration include a variety of grade-level and departmental meetings for teachers to discuss students and instruction; some teachers have opportunities to attend conferences and have access to high quality PD. These opportunities are not available to all teachers, which directly impacts their ability to make changes. McMaster et al. (2020) argue that the type of professional development secondary teachers need involves many hours of training, follow-up, and extensive coaching. McMahan et al. (2019) warn against one-day workshops, which will not yield lasting impact. To best support teachers, we need to know the types of professional development available to them. Examining the landscape of literacy focused professional development and experiences with teacher training from the

perspective of secondary Language Arts teachers better informs the critical conversation surrounding literacy in public schools.

Research Questions

- How do secondary Language Arts teachers experience professional development in rural, suburban, and urban contexts?
- How do secondary Language Arts teachers describe their opportunities for professional development related to literacy topics?
- How do secondary Language Arts teachers describe the barriers for professional development at the secondary level in regard to literacy training?
- How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?

Definitions of Terms

1. Professional Development is defined as “structured professional learning that results in changes in teacher practices and improvements in student learning outcomes” (Darling-Hammond et.al., 2017, p.v). Professional Development will be abbreviated as PD.
2. Literacy refers to the integrated skills of reading and writing (Graham & Perin, 2007).
3. Science of Reading is both a body of research with an emphasis on phonics and decoding, incorporating systematic approaches to teaching literacy such as the Simple View of Reading, as well as a political and cultural movement advocating for a change to literacy in public education (Foster et al., 2024; Thomas, 2022).

4. Phonemic Awareness is the ability to hear and differentiate different sounds within a word (Shanahan, 2005).
5. Phonics is the connection between letters and the sounds they represent (Shanahan, 2005).

Significance of Study

This study is situated within a larger grant-funded research project exploring the contexts of literacy education at the secondary level in the state of Kansas. Students at the secondary level need literacy support, but secondary English teachers are not always prepared to give that support. Professional development and training provide opportunities for secondary English teachers to receive that valuable support. This dissertation explores the landscape of literacy-centered professional development offered to secondary English teachers in Kansas in the hopes of capturing the opportunities and barriers regarding secondary literacy in the state of Kansas. This dissertation research, alongside the larger grant-supported study it draws from, can provide direct help to secondary English teachers as it will give researchers, policymakers, school districts, and teachers themselves, a better idea of the type of strengths, barriers, and impacts of professional development across the state.

Methodology

The data for this dissertation was collected under a grant-funded research project to improve literacy outcomes in Kansas, with the long-term goal of creating resources for Kansas educators to better support literacy practices and to describe the landscape of literacy education in the state of Kansas. This grant-funded research was conducted by a midwestern, land-grant

public R1 university. The project launched in Fall 2024, with the data gathering process beginning in May 2025. I joined the grant work in a supporting role in early Spring 2025.

The data collection for the larger research-grant project took place in several phases. First, a survey with both closed-ended and qualitative open-ended questions was sent out to every school district in the state, with the goal of reaching every secondary English Language Arts teacher in the state. The survey received 280 responses. The survey asked teachers to reflect and report on their experiences with literacy in the classroom, asking them questions about their teaching contexts regarding school and district settings, curriculum, their teaching strategies, and how prepared and effective they felt regarding literacy, to name a few items.

During this survey, teachers were asked to participate in a follow up interview, and 14 participants continued to the follow up interview phase, held in June 2025. The lead PI conducted the first interview, which was used to norm the rest of the interviews. The co-PI, another GTA, and I conducted the first round of interviews. During the follow up interview, teachers were asked more in-depth questions about their curriculum, curriculum selection, text selection, reading formats in their classrooms, vocabulary assessment and instruction, reading comprehension, writing instruction, and preparation for ELL students. These interviews also probed into teachers' preparation programs, how much preparation they had to make these decisions, as well as how prepared they felt in teaching, and what supports they needed and barriers they face.

A third phase of the grant-funded research study was conducted during July 2025, when participants from the study and content experts from around the state were invited to participate in a literacy summit to share best practices in teaching literacy. This phase was a response to the

data collected during the first two rounds, where educators shared their needs for strategies and content that would support their teaching practices.

The fourth phase of the grant-funded research study was a final round of data collection. The 14 participants from the June interview were invited for follow-up interviews, and 11 continued to the second round of interviews. These interviews were conducted by another GTA and myself. During these interviews, teachers shared their experiences with professional development and English Language Learners.

To support this grant-funded research work, I gave feedback and input on the survey and interview protocols, drawing on my own experiences as a secondary English Language Arts teacher, as well as preliminary research for this dissertation. I helped distribute the survey through website scraping for teacher emails. I provided logistical support and hosting duties for the literacy summit. I helped schedule and participated in conducting both rounds of interviews.

My dissertation research draws from the larger data set collected from in this grant-funded research work. I used a mixed-method approach, drawing on a combination of qualitative and quantitative research. The research design is convergent, parallel mixed-methods, as both the qualitative and quantitative research were collected at roughly the same time, without analyzing the data between the collection phases (Castro et al., 2010; Creswell, 2014). The closed-ended survey questions provided Likert-scale data regarding teachers' self-efficacy with literacy topics. The open-ended survey question and interview data provided a richer description of teacher's experiences regarding experiences with both literacy and literacy focused professional development (Castro et al., 2010; Creswell, 2014).

The dissertation data was analyzed in two phases. First the closed-ended survey questions were analyzed using MAXQDA. I ran an ANOVA test to look for variance among self-efficacy

levels in teachers in rural, urban, and suburban settings (Creswell, 2014). Then the qualitative coding took place, and finally the qualitative codes were analyzed quantitatively through MAXQDA. I ran a Chi Square test to look for differences in code frequencies between the rural, urban, and suburban contexts (Johnson & Christensen, 2012).

The data is presented separately. First, I present the quantitative findings, and then qualitative findings, including the quantitative analysis of the qualitative code frequencies. I interpret how the qualitative and quantitative findings come together, or do not come together, in my discussion section using the lens of sociocultural theory (Creswell, 2014; Lewis et al., 2013; Vygotsky, 1978).

Organization of Study

- **Chapter One** introduces the proposed study. This chapter explores the conversation around literacy education, including the reading wars and the Science of Reading, with special attention to the specific challenges secondary Language Arts teachers face. This chapter also gives an overview of the professional development landscape I explore throughout this dissertation. I also include the purpose of the study, the statement of the problem, the research questions, definitions of a few key terms, the significance of the study, an overview of the methodology, and an outline of the study.
- **Chapter Two** outlines the theoretical framework I use to guide my research and analysis, which is sociocultural theory. The literature review further explores the current educational contexts surrounding literacy, especially at the secondary level. This chapter also provide a framework for examining the effectiveness of professional development.
- **Chapter Three** focuses on the methodology for this dissertation. It provides the research questions, procedures, outlines the data collection, and provides information regarding the data analysis and coding. It also discusses the trustworthiness measures.
- **Chapter Four** explores the collected data and key themes that emerge.
- **Chapter Five** examines findings, theoretical analysis, and implications for future research.

Chapter 2 - Literature Review

Literacy and teacher education are multifaceted. Education is inherently political, and facts and opinions about literacy education have captured the public conversation, influencing policymakers. Literacy is in and of itself complex, encompassing reading, writing, speaking, and listening, offering challenges at all grade levels. Teachers must be adequately prepared to face these challenges. This chapter offers an overview of the complex workings that go into teaching a literacy curriculum and training teachers to use that curriculum.

This chapter is divided into five sections. The first section explores teaching contexts in Kansas. The second section “The Reading Conversation” is divided into two subsections. The first subsection, “The Reading Wars,” explores the contexts of literacy education, both historically and today, offering insight into the current public conversation and media representation surrounding literacy education. The second subsection, “The Science of Reading,” focuses on reading content as it is taught in schools. This subsection delves deeper into the science that is being debated within the reading wars. The third section “Literacy” explores the state of literacy education in schools today. The fourth section, “Professional Development” provides context with which to consider professional development opportunities. This section also provides a practical guide and overview of professional development as it takes place within schools today. The final section presents the theoretical framework for my research, which included both Vygotsky’s (1978) sociocultural theory and Lewis et al.’s (2013) critical sociocultural theory, which builds on his work.

The Reading Conversation

The Reading Wars

The reading wars are not new. The American public has been debating literacy education, and the best way to provide reading instruction, over the last seven decades (Foster et al., 2024; Skerrett et al., 2024; Thomas, 2022). Public conversations have questioned and criticized reading policy, teacher education preparation programs, reading instruction, and theories regarding teaching reading (Thomas, 2022).

During the 20th century, literacy practices swung based on these fads, styles, and debates (Shanahan, 2005; Skerrett et al., 2024). The literacy debate centers on the early years of reading education. There are two opposing approaches in policy and classroom practices. In the whole language camp, there is a push to make classrooms friendlier and connect students with exciting books, with the hopes that the magic of reading will happen. This argument centers on a balanced literacy approach (Shanahan, 2005; Skerrett et al., 2024; Thomas, 2022). In the other camp, there is a push to arm children with enough skills that they will learn to read (Shanahan, 2005). This is a phonics-based approach, using The Simple View of Reading (Thomas, 2022). The two camps differ on the best supports for early literacy (Skerrett et al., 2024).

Starting in the 1950s with the now infamous book *Why Johnny Can't Read*, the debate over whole language versus phonics instruction has seen several iterations as the pendulum swings between the two approaches (Durán & Hikida, 2022; Grissmer et al., 2024). In the 1960s and again in the early 2000s, there has been a focus on decoding, and we find ourselves back in that moment of time. Emily Handford's 2018 "Why Kids Aren't Being Taught to Read?" kicked off the most recent skirmish in the reading wars. Even more recent focus has shifted, once again, to building background knowledge (Skerrett et al., 2024).

The reading crisis fueling the reading wars may be manufactured. Even though the National Research Council rejected the dichotomy of phonics vs whole language in 1998, the war in the media rages on (MacPhee et al., 2021). The reading wars are fueled by a concern about reading scores; however, reading scores have remained flat in the last two decades, and drops in scores are connected to the Covid-19 pandemic. Another issue is the National Assessment of Educational Progress' (NAEP, 2024) use of the word proficient in reporting scores. When media coverage reports that students are not proficient, the public hears that students cannot read, adding fuel to the growing concern over literacy. However, NAEP reports that their level of “proficient” is higher than grade-level. This means that if a student is reading at grade level, they would not be “proficient” in NAEP’s reporting (Compton-Lilly et al., 2023). These sorts of miscommunications create openings for the media to control and push a narrative around literacy, rather than engaging in its complexities. Adding to the misinformation is the fact that the media is more likely to cite think tanks than university or government researchers, which adds to the hysteria (MacPhee et al., 2021). The hard truth is that learning to read is complicated, and for some students, it’s difficult; our public conversation should reflect those complexities.

Reading is a deeply complicated and complex action. While the public debate attempts to break down learning to read into a simple issue with a clear policy to implement, reading is complex and effective policy is difficult to design and implement (Thomas, 2022). Reading instruction includes pedagogy, policy, and politics (Foster et al., 2024). Reading is not a simple concept to teach but rather requires teachers to monitor student progress and choose an appropriate approach for each child (Compton-Lilly et al., 2023).

Reading does not exist in a vacuum, and the reading wars fail to examine the broader contexts of schools with low test scores, such as their access to resources and supplies, compared

to the conditions of schools in more affluent areas with higher test scores (Durán & Hikida, 2022). Ultimately, phonics instruction will not solve socioeconomic issues (MacPhee et al., 2021). Students in under-resourced schools are more likely to be in highly structured phonics programs because their schools are heavily scrutinized (Durán & Hikida, 2022). But this may not be the best approach for them.

Students need reading programs that are designed specifically for their unique needs (Thomas, 2022). For example, phonics only instruction coincided with dramatic falls in reading scores in a Navajo Nation school, suggesting that cultural sensitivity and culturally sustaining practices are needed in addition to phonics (Durán & Hikida, 2022). Compton-Lilly et al. (2023) argue that it is not only inaccurate, but detrimental and cruel, to insist that phonics, an impossibly narrow solution, is the only solution to help all children learn to read, arguing that instead, we should instead be focusing on the needs of specific children.

The public conversation around teaching literacy has directly impacted policy, as there have been policy changes in response to the reading wars. Since 2013, 47 states and Washington DC have passed laws adopting Science of Reading approaches to teaching literacy (Thomas, 2022). Policymakers are attracted to the Science of Reading because its simple, actionable approach makes writing policy easier (Compton-Lilly et al., 2023). However, one-size-fits all solutions should be avoided. Instead, literacy policy should support students at the school, district, and state level (Thomas, 2022). Updating policy does not necessarily lead to change (Foster et al., 2024). Additionally, the science behind the Science of Reading lacks empirical evidence (Compton-Lilly et al., 2023; Durán & Hikida, 2022).

The Science of Reading and the reading wars are conceptual metaphors representing reading as war and reading as science. The media frames the literacy crisis as a simple problem

with one, scientifically proven solution, suggesting the literacy crisis can be solved by just applying the Science of Reading. The media markets the Science of Reading as a proven science, representing it as scientific fact, reducing the reading wars into a black and white issue. By using the metaphor of a reading war, those advocating for the science of reading are heroes wielding the weapon of science (MacPhee et al., 2021).

The Science of Reading

Because of its use in reading wars, the term “Science of Reading” (SoR) is both political and polarizing. The term “Science of Reading” entered the cultural zeitgeist with Emily Hanford’s 2022 podcast, “Sold a Story.” SoR is a shorthand for a variety of ideas and a body of research with an emphasis on phonics describing various processes through which children learn to read (Foster et al., 2024; Thomas, 2022). Advocating for a phonics-based approach to literacy, SoR is a systematic approach focusing on phonemic awareness, phonics, reading fluency, vocabulary and comprehension (Durán & Hikida, 2022). It incorporates basic ideas such as The Simple View of Reading and Scarborough’s Rope as foundational frameworks for learning to read, recognizing that both word recognition and language comprehension are needed for learning to read (Skerrett et al., 2024). More recently, states passing legislation on literacy have included the phrase “Science of Reading” (Thomas, 2022). Because of the popularity of the SoR rhetoric, policymakers have increased the pressure to see results on standardized assessments. States have also begun pressuring teacher preparation programs to align with SoR (Foster et al., 2024).

The Science of Reading movement, in its current iteration, over exaggerates problems in teaching literacy today and provides over-simplified solutions. This approach is represented in the media and in the political landscape as a cut-and-dry scientific approach, but within

academia, it remains more complex (Thomas, 2022). While SoR looks at a systematic approach to literacy instruction, it does not address structural inequalities within our school system and society as a whole. Even though SoR policies are becoming increasingly popular, both politically and in teacher preparation programs, NAEP indicates scores are trending down, rather than up. Interestingly, strong readers are doing better, while weak readers are doing worse (Durán & Hikida, 2022).

The popularity of SoR may be waning. The journal *Literacy Research and Instruction* published survey results entitled “Beyond the Science of Reading,” suggesting it is time to move on. In contrast to the Science of Reading, more recent evidence, which is gaining popularity, looks at the role of content knowledge in a students’ ability to learn to read (Durán & Hikida, 2022; Grissmer et al., 2024). Knowledge building curricula integrates science, social studies, and vocabulary building to build students’ knowledge about the world around them, which leads to better reading comprehension (Grissmer et al., 2024).

LETRS Training

In response to the popularity of the Science of Reading movement, Lexia, a learning company, an offshoot of the Cambium Learning Group, launched Language Essentials for Teachers of Reading and Spelling (LETRS) training. Lexia is an educational company that has been advocating for a phonics-based approach since the 1980s. Pointing to the 2020 pandemic and Emily Hanaford’s “Sold a Story,” as bringing attention and focus to early literacy, Lexia launched LETRS, a professional development product, in 2021. Developed by Dr. Louisa Moats, LETRS provides training for PK-5 educators focusing on early literacy and the science of reading, including the 5 pillars of literacy. The training includes online modules, live PD sessions, and two textbooks. The training takes place in 8 units over a period of two school years,

giving teachers ample opportunity to apply the training in their classrooms, and reconvene for support in the next training session. Lexia puts forth that they have trained 625,000 educators, and they found a correlation between their products and improved state test scores (Lexia, 2026). While the LETRS training is widely available, throughout all 50 states, LETRS is essentially a professional development product, which can be purchased and implemented to various degrees of success. It is one component of the multifaceted and nuanced literacy landscape.

Literacy

For this dissertation, I will be drawing on a definition of literacy that includes reading, writing, speaking, and listening (Anderson et al., 2022; Graham & Perin, 2007). Graham (2019) believes teachers need the knowledge and skills to teach reading and writing, and teachers need to incorporate writing to support learning. Because writing is just as important as reading, students need the ability to write to be successful in both school and their personal lives (Graham & Perin, 2007; Graham, 2019). Writing is a predictor of future success, and the ability to write analytically directly impacts socioeconomic status and future earning potential because of the importance of writing in college and career readiness, as well as promotions in salaried positions (Arshan et al., 2024; Booth Olson et al., 2020; Booth Olson et al., 2023; Graham & Perin, 2007; Graham, 2019). Argumentative writing is a way to demonstrate critical thinking skills (Booth Olson et al., 2023). Writing well improves students' abilities in other subjects as well (Graham, 2019).

State of Literacy in the United States

The reading wars may be a manufactured conflict, with the threat of the literacy crisis exaggerated by the media (Durán & Hikida, 2022). In fact, there are some classrooms with incredible teachers and successful students (Graham, 2019). Reading scores at the 4th grade level

have seen very little change over the last 30 years (Foster et al., 2024), despite the pendulum swings and debates. However, there are reasons to be concerned, or at least reasons to engage with the conversation regarding the state of literacy education in the United States today.

Reading has been emphasized over writing ever since No Child Left Behind (Traga Philippakos, 2024). Concern for writing at the secondary level continues today (Graham, 2019; Smit et al., 2022). One issue seems to be with students' ability to apply cognitive strategies. For example, one study found that only 15% of students scoring at the proficient level of writing could write a coherent argumentative essay (Booth Olson et al., 2023). Most American students score below grade level in writing, which sets off a negative feedback loop where writing is difficult, so students become anxious about it, so they do not want to write, and writing remains difficult. In fact, only a quarter of American students are strong writers (Collins et al., 2019). Recent NAEP scores indicate 74% of 8th graders were basic or below basic writers (Graham, 2019; Ray & Mason, 2024).

To address these issues, the Common Core standards shifted its focus to include writing. The Common Core standards ask students to be able to write to persuade, inform, and entertain, as well as conduct research, evaluate learning, and create responses to their research. Students should be able to write shorter paragraphs and longer pieces of writing, including revision. However this shift to emphasize writing has not panned out (Traga Philippakos, 2024). Overall writing instruction in the United States is inadequate, and teachers are not spending enough time on writing (Graham, 2019; Traga Philippakos, 2024).

Literacy in Kansas

The Kansas Board of Regents has been working on a structured literacy initiative since 2018 to respond to literacy rates in Kansas. In 2024, 66% of Kansas 8th graders performed at or

above the basic level, and 25% performed at or above the proficient level (NAEP, 2024).

Looking at the 2025 English Language Arts State Assessment, 44.5% of students are proficient or advanced, and 55% are limited or basic in their literacy skills (Lane, 2026).

In 2018, the initiative began with a focus on dyslexia. The Every Child Can Read Act, which took effect in July 2023, requires schools to follow the framework outlined in KSDE's Dyslexia Handbook. It asks schools to focus on phonics, vocabulary, fluency, and reading comprehension. The law gives schools recommended interventions and support. (KSDE, 2023). Then in 2024 the Blueprint for Literacy legislation outlined a plan to improve literacy preparation in both education preparation programs and for working teachers. This plan centers Science of Reading. Kansas has the explicit goal of having all elementary teachers complete a structured literacy course (or demonstrate competency by passing a Praxis test) by 2030. The Blueprint for Literacy also outlines performance goals on the ELA state assessment for students in grades 3 through 10, with the goal of 90% of students in grades 3 through 8 being at the basic level (Lane, 2026).

The measures included supporting teachers in completing LETRS training as well as offering structured literacy courses. Since 2021, KSDE has supported teachers in accredited Kansas schools, both public and private, to access LETRS training, providing both financial and logistical support (TASN, 2026). As of October of 2025, 7,219 Kansas educators, including administrators and early childhood educators had completed LETRS training, and an additional 2,500 had completed the coursework but had not finished the test. The plan also supports a KSDE Literacy Leadership Cadre. (KSDE, 2025). The plan includes goals for educational preparation programs, curriculum mapping, literacy assessment systems, training modules, and professional development. These supports span pre-service teachers, current teachers, and

paraprofessionals (Lane, 2026). Alongside goals for students up to 10th grade, secondary teachers need access to support for secondary students.

Teachers Unprepared to Teach

One common theme running alongside the literacy conversation is that teachers express feeling unprepared or underprepared to teach literacy. Teachers report feeling more prepared to teach the appreciations of literature rather than literacy or writing specific skills and strategies (Davis et al., 2018; Lillge, 2019; Ray & Mason, 2024; Savitz et al., 2019; Traga Philippakos, 2024). Content area teachers in high-poverty schools where half of students are reading below grade level report not feeling prepared to close these gaps (Davis et al., 2018). Teachers report not having enough reading skill knowledge to use assessments to make data-informed decisions and needing additional PD to support them in supporting students' literacy needs, which is an important part of closing these gaps (Henderson et al., 2018; McMaster et al., 2020). Teachers do not see themselves as writers, which makes feeling qualified to teach writing difficult (Lillge, 2019). One issue is that teachers do not feel prepared to integrate reading and writing to teach both skills (Doubet & Southall, 2018). There is a difference between what teachers perceive their deficits are and what their deficits actually are, indicating teachers struggle to even identify where they need more preparation (Henderson et al., 2018).

This lack of preparation goes back to teacher preparation programs and professional development opportunities. Teachers express not feeling prepared to teach literacy skills after their teacher preparation programs, with only one third of teachers reporting feeling prepared by their programs (Lillge, 2019; Ray & FitzPatrick, 2022; Ray et al., 2024; Traga Philippakos, 2024; Whatley & Smith, 2023). Teachers need ongoing professional development, but the additional training during their teaching experiences appears to be inadequate (Lillge, 2019).

Less than half of teachers reported not receiving enough training in writing, and about 10% reported not having any formal training (Traga Philippakos, 2024; Whatley & Smith, 2023). Other studies also see teachers reporting that they are not receiving enough hours of PD or intensive enough PD trainings (Garet et al., 2001). These issues directly impact the classroom and students. When teachers do not understand the procedures to adequately take on literacy needs, they are not using them with enough frequency in the classrooms (Graham, 2019).

Literacy at the Secondary Level

The conversation and the research focus around literacy centers on students at the elementary level because of the significance of learning to read at a young age, and its impact on education as the students grow. Despite the focus on early literacy strategies for younger readers, secondary students still need support developing their reading skills and knowledge (Skerrett et al., 2024; Smit et al., 2022). Students at the high school level who struggle to read need intensive interventions (Davis et al., 2018).

While there are effective strategies to support middle and high school students, teachers tend to use ineffective strategies, like round robin reading. Secondary students also need to build fluency and comprehension skills. Secondary students need to be able to read and write academic texts as well as literature (Beck et al., 2002; Skerrett et al., 2024; Smith & Williams, 2020).

Rather than having a prescriptive approach to teaching reading, teachers need to be able to respond to the needs of students (Compton-Lilly et al., 2023; Skerrett et al., 2024).

Traditionally, students at the middle and high school level read texts that are considered to have literary merit, commonly referred to as the canon. Today there is a shift to include texts that reflect and connect with contemporary students and shift to wide reading, where students read one text after another, which positively impacts students' reading. For students to reap the

benefits of wide-reading, they need to read regularly at school and at home and have access to a variety of content and choices. Additionally wide reading is social, as students talk about and share their reading. Wide reading is the most similar to how adults read. The choice component of wide reading is important because students' confidence and reading identity vary in different subject areas (Skerrett et al., 2024).

Secondary writing is another area where secondary students need support. Time devoted to writing has a significant impact on creating strong writers (Graham, 2019). Secondary writers need to learn specific strategies and use models (Graham, 2019; Kwok, 2022; Traga Philippakos, 2024). Teachers need to be supported in teaching explicit strategy instruction. Students need to practice writing in a reading and writing integrated model. Teachers need to be able to assess students' needs and make changes to meet those needs (Graham, 2019; Traga Philippakos, 2024). Currently, high stakes writing assessments ask students to write with no real audience in mind, but Graham (2019) calls for authentic writing based on students' goals and incorporating student motivation.

National Reading Panel Topics

The National Reading Panel is made up of scholars who were tasked with the goal of finding effective instructional practices in teaching literacy skills. The panel considered studies with measurable outcomes, allowing them to identify effective practices, only drawing conclusions if the strategies were truly effective. Because of its reliability, this report is used to inform federal literacy policy. They divided literacy instruction into five categories: phonemic awareness, phonics, oral reading fluency, vocabulary, and reading comprehension (Shanahan, 2005).

Phonemic Awareness

The first topic the panel reported on was phonemic awareness. Whereas phonics focuses on the connection between letters and the sounds they represent, phonemic awareness refers to the ability to hear individual sounds within words. Phonemic awareness falls under the umbrella of phonological awareness, which is an ability to hear and manipulate larger sounds within a word (Shanahan, 2005). Using phonological awareness, students hear sounds and then manipulate them out loud, which is a key ability in learning to read (Shanahan, 2005; Skerrett et al., 2024). Phonemic awareness is the basis for learning to read because it gives students the ability to match the sounds to letters (Foster et al., 2024; Skerrett et al., 2024). Phonemic awareness skills correlate with strong reading abilities (Accardo & Finnegan, 2017). While there is a lot of emphasis on phonics instruction, one meta-analysis showed that the long-term benefit of phonemic awareness intervention was more impactful than phonics instruction, and phonemic awareness had a greater impact on later reading skills (Skerrett et al., 2024). Practice involving specifically segmenting and blending supported reading skills, but after students can do this, there is little additional benefit from practicing this skill (Shanahan, 2005).

Unfortunately, teachers have knowledge gaps in supporting instruction in phonemic awareness as well as phonics instruction (McMahan et al., 2019). There is little research on how prepared beginning teachers are to give phonics instruction (Thomas, 2022). These gaps in knowledge go back to teacher preparation programs and college textbooks, highlighting the need to better support teachers in bringing reading research to the classroom. This lack of training on this topic directly impacts students (McMahan et al., 2019). Pre-service teachers need more phonemic awareness knowledge, better decoding knowledge, and more knowledge on decoding instruction, and training on supporting diverse learners (Thomas, 2022).

Phonics

Phonics instruction focuses on how letters and sounds work together. Students use phonics skills to decode words. Phonics instruction improved students' ability to learn to read through both word recognition and reading comprehension. Decoding is an important part of phonics instruction, as good readers are able to resolve every word. Students need to practice sound-symbol correspondence and spelling (Durán & Hikida, 2022; Shanahan, 2005; Skerrett et al., 2024).

Phonics is central to the Science of Reading movement (Foster et al., 2024). However, after the second grade, phonics instruction no longer improves students' reading comprehension. When reading below the second-grade level, sounding-out a word will produce a word students will recognize when said aloud. For example, c-a-t- becomes cat; they hear the word cat; and they know what a cat is. But after second grade, sounding out a word does not produce a word they know the meaning of, so decoding will not improve their understanding of the passage. For example, an adult practicing sounding out a foreign language word would not improve his ability to understand a language he does not know (Shanahan, 2005).

Oral Reading Fluency

The National Reading Panel sees fluency as one of the five components. Students have oral reading fluency when they are able to read out loud with accuracy, speed, and expression (Shanahan, 2005). Oral reading is part of the American literary tradition, and in fact, it was a large part of classroom instruction until around 1925. After this time, there was a shift to focus on comprehension instead of oral fluency, and with this shift came an emphasis on silent reading. In the 1970s and 1980s, there was a return to oral reading fluency, recognizing that fluency is an important component of proficient reading (Skerrett et al., 2024). Fluency is more than just word recognition and more than decoding, and it is taught through practice. For students to be

effective, fluent readers, they need to hear fluent readers, participate in assisted reading, and practice both deep and wide reading (Shanahan, 2005). In assisted reading, students read out loud with a stronger reader. Another support is for students to practice repeated reading (Shanahan, 2005; Skerrett et al., 2024). Students should also receive feedback. Teaching oral reading fluency improved reading scores, decoding skills, word recognition, and reading comprehension (Shanahan, 2005).

Vocabulary

The third component the panel identified was vocabulary. Vocabulary focuses on word meanings. The panel found explicit vocabulary instruction impacts students reading comprehension (Shanahan, 2005). Along with supporting overall comprehension, vocabulary instruction helps students build background knowledge. Explicit vocabulary instruction supports students' success in content classes and improves engagement. Students who receive vocabulary instruction outperform students who do not (Dennis et al., 2024; McKenna et al., 2020; Skerrett et al., 2024; Smith & Williams, 2020). Although the instruction is not explicit, just reading also increases vocabulary. Even pre-viewing key words before content reading improves comprehension (Shanahan, 2005).

While vocabulary instruction is important, teachers are not prepared to teach vocabulary, and they are not spending enough time on it, or it is absent. Teachers use ineffective strategies, like copying from a dictionary (Dennis et al., 2024; McKenna et al., 2020). Instead, teachers need support in learning effective vocabulary instruction.

Since teachers cannot teach every single word, it is imperative they strategically select specific vocabulary words to have the most impact. Vocabulary builds comprehension, so vocabulary terms should be words that are frequently used or support specific contents (Smith &

Williams, 2020). Beck et al. (2002) describe a tiered system for choosing vocabulary words. They argue that common words (Tier 1) do not need to be explicitly taught, as students will pick up their meaning naturally, and hyper-specific, uncommon jargon words (Tier 3) are not encountered often enough to make a large enough impact. Instead, teachers should focus on high-frequency words that will be encountered in both the everyday world and in literature (Tier 2) (Beck et al., 2002).

Students need explicit, direct instruction of vocabulary that includes literary as well as contemporary contexts (Dennis et al., 2024; Skerrett et al., 2024). In effective vocabulary instruction, students experience multiple, meaningful connections with words. To best introduce and explicitly teach vocabulary, teachers should give a student friendly definition, give a visual example of the word, give synonyms, and give an example sentence (McKenna et al., 2020). Three common vocabulary instructional strategies are to examine contexts and semantics, and for students to have repeated exposures in a variety of contexts. Successful vocabulary instruction includes instruction on word meanings, finding meaning from context, and using root words and affixes. Additionally, students should be considering morphological parts of words, with instruction considering root words (Skerrett et al., 2024). Students need scaffolding and feedback in their vocabulary instruction (Shanahan 2005). Five is the best number of words to introduce at once, so students do not get overwhelmed. Students need to repeat vocabulary words and create examples.

Comprehension strategies

The final component the panel identified was reading comprehension. Reading comprehension focuses on understanding and constructing meaning from information within the text. A simple view of reading explains that reading is just decoding plus comprehension

(Shanahan, 2005; Skerrett et al., 2024). This places an emphasis on reading comprehension. The panel set out to see if reading comprehension strategy instruction impacted students. The panel clarified that a comprehension strategy is an action a reader takes to understand the information they are reading (Shanahan, 2005). For example, explicit instruction on finding the main idea supports comprehension (McKenna et al., 2020). The panel found seven strategies that helped students improve their reading comprehension. These were questioning (both asking and answering), monitoring, summarizing, story mapping, using graphic organizers, cooperative grouping, drawing on background knowledge, and using mental imagery (Shanahan, 2005). Supporting students in these five categories improves reading abilities and builds background knowledge (Grissmer et al., 2024; Ray et al., 2024; Skerrett et al., 2024;).

Successful Writers

Writing is complicated, as it requires long-term memory, a positive writing environment, and using the writing process. Students need to plan, generate ideas, and construct their writing. Writers then articulate those ideas into words and finally review what they have written (Graham, 2019; Traga Philippakos, 2024). Putting ideas into words and finding ideas to support arguments are two of the most difficult writing tasks (Henderson et al., 2018). Constructing an argument adds to the complexities of writing; students struggle crafting an argument and anticipating and constructing a counter argument (Prata et al., 2018). During this complicated process, students need to monitor their writing from one stage to the next (Traga Philippakos, 2024). Graham and Perin (2007) found that 70% of secondary students struggle with writing. While elementary students' writing has improved, writing at the secondary level has stagnated (Henderson et al., 2018).

As with becoming successful writers, becoming successful readers requires students to be able to both decode the written word and to develop a knowledge base to engage with what they are reading (Foster et al., 2024). English teachers do not feel prepared to support students struggling with reading because of these complexities; just because someone is a good reader does not mean they will automatically be able to teach reading (McMahan et al., 2019).

Reading Instruction and Identity

Considering reading identity is especially important for students at the secondary level; students' history with reading acts as a self-fulfilling prophecy. Students self-identify as either a good, average, or poor reader, which is influenced by the use of textual reading levels. Students who have had a positive experience with reading continue to feel positively about it. They have a strong reader identity. Students who have struggled with reading continue to feel that they are poor readers; however, outside of school, they may have more positive relationships with reading. Reading identity changes based on the subject, as different content areas have different demands. These feelings are especially relevant to secondary students, who are exploring their own identities in general (Skerrett et al., 2024).

When students improve their perceptions of their reading abilities, their reading identities also improve. When students have the chance to select texts that connect to their interests or are culturally relevant, their reading identity improves. Students are also able to engage with and analyze more complex texts if the texts are relevant to the student. Additionally, if students are interested in a text, they are better to engage with reading strategies. Together these strategies improve how students feel about their reading abilities (Skerrett et al., 2024).

Reading instruction is a cornerstone of literacy pedagogy. Skerrett et al. (2024) discusses practices that students use when reading, such as looking for patterns and puzzles, noticing when

something is strange, confusing, or surprising, looking for different interpretations, considering the contexts of the texts, and finally making claims. Instruction should include “sourcing, contextualization, corroboration, close reading, and rereading, critical response to text, and attending to textual features such as graphics” (Skerrett et al., 2024, p. 61). There is a need for more instruction that focuses on critical literacy, where students consider author’s purpose and choices in constructing their text. There is also a need for comprehension instruction, which is explicit instruction on verbal reasoning, verbal analysis, and background knowledge, especially at the preschool and kindergarten age (Skerrett et al., 2024). Reading and writing are often taught separately, but an integrated instruction would be best (Doubet & Southall, 2018).

Writing Instruction

Teachers’ attitude toward teaching writing is key in high-quality writing instruction. Teachers need “a coherent, well-constructed and consistent vision for teaching writing on as many levels as possible” (Graham, 2019, p.290). Teachers do not feel prepared to teach evidence-based writing instruction (Ray et al., 2024). Because writing is difficult and complex, students need to be spending more time writing. Not writing frequently enough is associated with poor writing instruction (Graham, 2019).

When teachers feel more confident in their writing instruction, they spend more time teaching writing. Writing instruction requires an understanding of content, student learning, and writing pedagogy. Writing instruction should support reading instruction, and the two should be integrated. Teachers must pull together a vision of the skill and knowledge needed to write effectively and commit to daily writing instruction (Graham, 2019). Writing instruction also changes to meet different student needs.

Writing should be taught as a recursive process, not linear, and students should write for a wide range of purposes. Students should set goals and generate ideas as part of their recursive process. Students should be writing frequently. Students should be regularly planning, drafting, editing, revising, and publishing their work. This gives students enough practice with the writing process that they no longer feel uncertain (Traga Philippakos, 2024). Graham (2019) recommends that writing instruction use a model-practice-reflect cycle.

Writing instruction must address the complexities of writing tasks. Students must juggle grammar rules, organizing ideas, purposes, and create a coherent message. Writers take in information they have read or experienced and transform it into something new. Students need some basic writing skills, like sentence construction and word processing. Formative assessment should be a part of the recursive writing process, as students receive and apply feedback (Traga Philippakos, 2024), and teachers use assessment to provide feedback and make changes (Graham, 2019). There is a need for explicit instruction in both grammar and mechanics and in composition at the secondary level (Smith & Williams, 2020). Students write better analytically in response to cognitively stimulating tasks, when given instruction on utilizing feedback, and when they are supported through classroom discussion. These tasks pushed students beyond superficial writing (Smolkowski et al., 2020).

Specific writing strategies improve student writing outcomes. While the writing process helps general education students, students who are struggling need explicit writing instruction and interventions (Henderson et al., 2018). Cognitive strategies allow students to plan, make connections, reflect, and evaluate (Booth Olson et al., 2020). Strategies are specific tools students use when writing. Learning a strategy gives students a set of steps to take to work through a complex task, such as the Self-Regulated Strategy Development (SRSD) model (Ray

et al., 2024; Ray & FitzPatrick, 2022; Ray & Mason, 2024; Traga Philippakos, 2024). Teachers activate students' background knowledge, discuss, model, and memorize a writing strategy, and then apply the strategy. This method is especially helpful for instructing students with learning disabilities and behavior disorders (Ray et al., 2024; Ray & FitzPatrick, 2022). In one study, Prata et al. (2018) found a statistically significant improvement in argument structure and quality of writing between a group of students instructed with SRSD versus a control group. SRSD is effective because it provides a scaffold for students to grow into independent writers (Prata et al., 2018). SRSD allows for cooperative writing, which supports argumentative skills. Combining visual literacy and argumentative writing develops writing skills (Anderson et al., 2023).

Writing is social. Humans write in community, and they write for audiences (Traga Philippakos, 2024). Students need to see writing modeled and to practice writing for a variety of purposes and audiences (Smit et al., 2022). Because writing is social, students should be writing in a community where they connect with other students and where they share out, have choices, give feedback, and publish. Teachers should be active writers, as leaders of the community themselves (Traga Philippakos, 2024).

Not all writing is created equal, for example, when students respond to reading, taking notes is more effective than answering questions, and summarizing is better than either of those responses, but writing a personal response is the most effective response of the four (Graham, 2019). Explicit writing instruction is effective. Students feel more self-confident. Improving argumentative writing helps students' ability to self-advocate (Cuenca-Carlino et al., 2018). After receiving explicit instruction in argumentative writing, students increased their essay scores from pre-test to post test, they increased their total number of words, they felt more

confident about their writing and about the component of an essay (Ray et al., 2024). Teachers also report feeling benefits from training on writing instruction strategies, including paraeducators (Cuenca-Carlino et al., 2018). Teachers also reported better understanding of the gradual release model (Ray et al., 2024). Furthermore, improving writing skills directly improved reading comprehension (Ray & FitzPatrick, 2022). Writing reinforces other content (Whatley & Smith, 2023).

Professional Development

An Overview of Professional Development

To establish a definition of professional development, I turn to Darling-Hammond et al. (2017), whose work in the field of professional development is prolific. Darling-Hammond et al. (2017) write “We define effective professional development as structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes,” (p. v). In this definition, Darling-Hammond et al. (2017) go on to consider sources of professional development both outside of the school district and activities that are embedded into the daily teaching, as they argue the focus of professional development is to increase teacher knowledge, improve instruction, and support student learning. Similarly, Desimone (2009), another juggernaut of the professional development scholarly community, defines professional development as simply activities meant to improve performance. Both definitions leave room for professional development (PD) to occur both formally and informally.

Studying the effects of professional development is inherently difficult. Early research explored teacher satisfaction, attitudes, and PD innovation, but there was less focus on the results or the effectiveness of the PD. When PD is studied, participants in such studies are teachers who are already eager to change. Highly qualified teachers are more likely to seek professional

development opportunities (Desimone, 2009). There is a need for effective professional and more research on what makes professional development effective.

When considering what makes professional development effective, it is helpful to consider the established frameworks used to evaluate PD. These frameworks provide an insight into what makes professional development successful. They offer guidance to districts who are planning or purchasing professional development and to teachers who are choosing professional development to attend. I turn to three authors whose prolific work on PD offers insight. These authors are Guskey (2003; 2014), Darling-Hammond et al. (2017) and Desimone (2009). Please see Table 2.1 for an overview of models for effective PD.

Table 2.1. Models for effective PD

Feature of Effective PD	Explanation	Researcher
Content Focused	Focuses on the curriculum and content the teacher teaches improves teacher knowledge, skill, and practices May be the biggest factor	Darling-Hammond et al., 2017 Desimone, 2009
Active Learning	Opportunity to design and try out teaching strategies Engage in new styles of learning interactive, contextualized learning Connection to the classroom	Darling-Hammond et al., 2017; Desimone, 2009
Collaboration	Space for teachers to share ideas Collaborate in job-embedded contexts Communities can change the culture and instruction at the school Working together in grade-level or content teams	Darling-Hammond et al., 2017; Desimone, 2009
Models of Effective Practice	Teachers need to see lesson plans, unit plans, sample student work, observations of peer teachers or videos of the targeted skills.	Darling-Hammond et al., 2017;
Coaching	Coaches share expertise and provide support for individualized needs.	Darling-Hammond et al., 2017;
Feedback and Reflection	Built in time to think, receive input, and make changes.	Darling-Hammond et al., 2017;

Sustained Duration	Teachers need time to learn, practice, implement and reflect on new practices. PD needs both enough time and to be spread over a longer duration.	Darling-Hammond et al., 2017; Desimone, 2009
Coherence	How well teacher learning is consistent with teacher knowledge and beliefs	Desimone, 2009

Guskey's (2014) model provides five levels with which to evaluate PD: participants' reaction to activities; participants' learning of new knowledge and skills, organization support and change, participants use of new knowledge and skills, and student learning outcomes (Earley & Porritt, 2013; Guskey, 2014). When planning PD, Guskey (2014) suggests focusing on student learning outcomes by considering the impact the PD will have on students, considering new practices that will lead to desired outcomes, the needs of the organization provide support, such as time and resources, the knowledge and skills educators will need to develop, and finally the training or professional learning activities that will lead to these outcomes (Earley & Porritt, 2013; Guskey, 2014). Please see Table 2.2 for guidance on planning PDs.

Table 2.2. Questions for Planning PD

Guiding questions for a successfully PD
(1) What impact do you want to have on pupils? How will you know that you have had this impact?
(2) If that is what you want to accomplish, then what practices do you need to implement?
(3) What does the organization need to do to support that; for example, what time/resources do people need?
(4) What knowledge do people have to have and what skills do they have to develop?
(5) What activities (e.g. training) do people need to gain those skills or knowledge?

Guskey, 2003; 2014

The first component of Desimone's (2009) framework includes a focus on content. When the PD focuses on teachers' subject matter content, teachers improve their knowledge and skills,

and this leads to improved practice. Desimone (2009) also asks PD to incorporate active learning. Effective PD is coherent, where teacher learning is consistent with teacher knowledge and beliefs. PD activities should occur over a long duration, for example meetings that take place over a long period of time versus one-day PDs. Finally, PDs are more successful with collective participation, where teachers from the same school, grade, or department participate in the PD together.

Darling-Hammond et al. (2017) also ask for PD that is content focused, as it supports teachers in their specific classrooms. They also call for active learning. Quality PD supports collaboration, where teachers work together to create positive change. Darling-Hammond et al. (2017) argue for the use of models as examples. Other criteria in their framework are providing coaching and expert support and offering feedback and reflection. Similar to Desimone (2009), Darling-Hammond et al. (2017) also call for a longer duration, which gives time to learn, practice, and then reflect on the strategies.

When considering the frameworks, there are some obvious overlaps. Both Desimone (2009) and Darling-Hammond et al. (2017) consider content focus, active learning, and duration as part of their frameworks. There are similarities between the frameworks, even if the verbiage is not identical. For example, Desimone's (2009) interest in collective participation overlaps with Darling-Hammond et al.'s (2017) interest in PD that supports collaboration. Guskey (2014) asks for a consideration of knowledge and skill, which is similar to Desimone's (2009) call for coherence. The components of the frameworks are not siloed but rather work together to improve PD overall. For example, Garet et al. (2001) found that a longer duration of PD lead to better opportunities for active learning. These frameworks serve to guide the critical conversation around professional development, as witnessed by the number of authors who use one or more of

these frameworks in their own research (Arshan et al., 2024; Earley & Porritt, 2013; Garet et al., 2001; McMaster et al., 2020; Polleck et al., 2021; Ray et al., 2024; Ray & FitzPatrick, 2022; Ray & Mason, 2024; Smith & Williams, 2020; Whatley & Smith, 2023). These frameworks provide both a language and an evaluation system through which to discuss professional development opportunities. PD is more effective and produces long-term, sustainable growth in student achievement when frameworks are used (Henderson, et al., 2018). Using frameworks increases teacher knowledge and skills, improves practice, and increases student achievement (Desimone, 2009).

Alongside official frameworks, the literature also offers best practices that contribute to a successful professional development. Earley and Porritt (2013) explain professional development should have a clear purpose and a goal. Participants should have the opportunity to engage in a variety of PD, and they should feel ownership over their activities. Henderson et al. (2018) argues that the gradual release model allows teachers to collaborate and to take ownership over their learning; whereas Whatley and Smith (2023) warn the workshop model, although more common, does not allow for collaboration. Darling-Hammond et al. (2017) argue that adults should be able to choose their own professional development, as they have a sense of their own needs. Darling-Hammond et al. (2017) also argue for opportunities for sense-making and reflection in PD. Desimone (2009) suggests that professional development becomes more manageable by focusing on the measurable outcomes that promote teacher growth.

Earley and Porritt (2013) call for strategic leadership, exploring how impact evaluation are used to make PD decisions. Focusing on student outcomes and student learning leads to better professional development (Earley & Porritt, 2013). Guskey (2014) discusses how assessment data, both formative and summative assessments, reveal areas where students need

support. Administrators then use this information to choose professional development that will impact students the most. Desimone (2009) gives a roadmap for successful PD where teachers attend effective professional development, increase their knowledge and skills, bring those new tools to their classroom, and this leads to increase student learning. Henderson et al. (2018) argue that leaders should backwards plan for a successful PD by using content-based, collaborative activities focused on improving student learning. Leaders should find gaps in student knowledge and then plan activities that would improve teacher skill and knowledge to be able to address these gaps (Henderson et al., 2018).

Effective Professional Development

Effective professional development is an important topic for study because teacher knowledge directly impacts students' reading skills (McMahan et al., 2019). Teachers need professional development to effectively teach. McMaster et al. (2020) explain that positive interventions require a high level of knowledge and skills. Teachers need both content knowledge and instructional techniques. For example, to successfully implement an intensive reading intervention, teachers first need effective professional development based on the ideas found in the above framework (McMaster et al., 2020). The good news is that effective professional development does work.

Darling-Hammond et al. (2017) argue that effective PD, when well-implemented, positively changes teachers and impacts student learning. McMahan et al. (2019) found that effective PD does in fact improve teacher knowledge. Tong et al. (2018) found that knowledge and skills gained from PD directly improved teacher's instruction. Teachers learned strategies that improved student engagement and cooperative learning (Tong et al., 2018). Savitz et al. (2019) found that teachers shifted their perspectives about literacy after PD, as well as increased

their knowledge and skills. Hands-on learning in PD increased engagement and increased feelings of preparedness (Savitz et al., 2019). Knackstedt et al. (2017) found that participants felt better prepared to teach reading to students with disabilities if they perceived their own teacher preparation program as effective or after engaging in PD. Rubin et al. (2021) argue that increased teacher knowledge leads to increased teacher autonomy. Professional development prepares teachers and positively impacts students. The stakes are high, as poor implementation leads to failed reforms (Davis et al., 2018).

Literacy Specific Professional Development

Content specific professional development is more effective than professional development outside of one's content. Examining this topic is important because there is very little research on reading interventions at the high school level, and reading intervention at the high school level is less effective than at the middle and elementary level (Davis et al., 2018). Teacher knowledge of writing development allows teachers to provide better writing instruction for students because they understand the steps students go through to become better writers (Beck et al., 2018). While many PDs ask teachers to consider their own experiences with writing, simply applying these experiences to writing instruction is too simplistic and not effective (Lillge, 2019). Teachers benefit directly from PD, as teachers feel more positively about teaching writing after receiving quality PD on the topic (Whatley & Smith, 2023). Through quality professional development, secondary literacy teachers are armed with the best interventions available.

Explicit instruction on comprehension strategies, including cognitive strategies, improve reading comprehension (Booth Olson et al., 2020; Booth Olson et al., 2023; Davis et al., 2018; Henderson et al., 2018). Specific instructional strategies such as Venn diagrams, cooperative

learning, and graphic organizers are effective in teaching reading comprehension (Accardo & Finnegan, 2017). Teaching reading and writing together is more effective than siloed instruction, but teachers need professional development to prepare them to integrate the two. Through PD, teachers change both their philosophy as well as their practices (Doubet & Southall, 2018). In order to successfully integrate reading and writing instruction, teachers must combine theory and practice, plan and reflect, and learn through an integrated model (Doubet & Southall, 2018). An integrated reading and writing curricula support higher-level and analytical writing (Booth Olson et al., 2023).

Professional development is central to improving writing instruction and therefore student writing, but there is little evidence on how teachers apply professional development on writing to their praxis (Lillge, 2019). Because funding and time is limited, school leaders are specifically looking for PD on writing that supports teachers in improving student outcomes (Henderson et al., 2018). High stakes testing affects the sustainability of PD on writing interventions, but PD help teachers move beyond the narrow definition of writing instruction in the high stakes testing environment (Collet, 2022; Henderson et al., 2018).

Content-specific strategies for professional development improves teachers' abilities to engage in literacy interventions. Similar to the research on improving reading comprehension, explicit strategy instruction is the most effective way to improve writing (Booth Olson et al., 2020; Booth Olson et al., 2023). Professional development on evidence-based writing instruction is an effective way to prepare teachers to teach writing, such as using practice-based professional development (PBPD) to support teachers in learning specific strategies and self-regulating strategies (SRSD) (Prata et al., 2018; Ray et al., 2024; Traga Philippakos, 2024). Assessment should be used to inform instruction and feedback on writing (Booth Olson et al., 2023).

There are a variety of effective interventions. When developing or applying an intervention, teachers should consider the effect size on reading outcomes, the dosage of the intervention, alignment to student needs, students' ability to transfer the skills to other contexts, the comprehensiveness of the intervention, the use of behavior supports, and if it is monitored through progress-monitoring for individualized support (Fuchs et al., 2018). Inquiry, modeling, and reflection are three PD strategies that improve teachers' ability to teach writing (Henderson et al., 2018). The tiered-text instruction model is an effective strategy using a series of texts on the same topic with increasingly difficult reading levels. This approach is used to scaffold students toward a grade-level target text (Zhang & Smolen, 2022). Akhavan and Walsh (2020) describe a Cognitive Apprenticeship Learning Approach that supports students in becoming strategic writers. The approach includes direct instruction, modeling, scaffolding, checking for understanding, coaching, and then a whole group reflection (Akhavan & Walsh, 2020). Teachers are better able to provide literacy interventions to their students after receiving training on specific interventions through professional development.

Coaching

There is a growing interest in coaching as a professional development model (Garet et al., 2001). Expert coaches are often educators who model instructional practices, facilitate supportive discussions, and lead collaborative analysis of student work (Darling-Hammond et al. 2017). They may come into teachers' classrooms or facilitate group workshops (Darling-Hammond et al., 2017). Discussions with coaches help teachers reflect on and improve their instruction (Guiney, 2001). Coaches support teachers in lesson and unit planning, provide teaching demonstrations, and give feedback. Teaching demonstrations were cited as particularly

helpful (Savitz et al., 2019). In the coaching model, teachers receive direct support from an experienced educator.

Coaching supports teachers' development and skills (Ray et al., 2024). In effective models, participants are engaged and collaborating (Vera et al., 2021). Coaches help in goal creation, conduct observations, and provide feedback in a collaborative partnership (Dennis et al., 2024). Coaching allows teachers to directly apply what they are learning to their own classrooms, which ultimately improves student outcomes (Polleck et al., 2021). Coaching also extends professional development opportunities to otherwise hard to service areas. For example, one way to support teachers in rural areas, could be through remote coaching, which can be facilitated through an online platform (Darling-Hammond et al., 2017). Coaching is a particularly beneficial form of professional development.

Coaching is a more effective form of PD compared to one-time events (Ray et al., 2024). Coaching allowed for a hands-on PD experience, which teachers found to be beneficial. Coaching increased teachers' feelings of self-confidence in literacy strategies (Savitz et al., 2019). Coaching is also proven to be effective. In one study, early childhood classrooms using a coaching model had larger gains than those in the control group (Darling-Hammond et al., 2017). Another study found that coaching within a PLC community made the largest impacts on teacher reform (Polleck et al., 2021). While there are many positives to the coaching model, it remains underutilized.

Coaching is an under-researched area. Few studies consider the impact of coaching on teacher knowledge and student learning. While some studies have positive outcomes for coaching at the middle and elementary levels, almost no studies consider the use of coaching at the high school level (Davis et al., 2018). One study did not find that coaching had a statistically

significant impact on teacher practices, nor on student achievement, indicating there is a need for more research to understand the best practices and limitations of the coaching model (Garet et al., 2001). Coaching is under-researched because coaching models are difficult to implement. Coaching is a demanding model of PD, requiring planning, establishment of roles, finding expert coaches, and getting buy-in from teachers as well as support from administration (Davis et al., 2018). Overall, there is a need for more research for this promising model.

Training Specific Professional Development

Professional development is often housed within and focused on schools. In more recent years, the model for PD has increasingly shifted to job-embedded PD (JEPD), often making use of professional learning communities (PLCs) (Smith & Williams, 2020). Because JEPD is so locally focused, it allows for targeted learning and gains that are specific to that school and district (Croft et al., 2010). The flexibility of JEPD allows schools and teachers to address the specific needs of their students (Darling-Hammond et al., 2017).

The JEPD model focuses on daily teaching, with content specific instructional practices (Croft et al., 2010). Because JEPD allows teachers to focus on their specific content, teachers are able to study their own students' work and curriculum, providing an added coherence to PD that would not otherwise be available in more generic PD models (Darling-Hammond et al., 2017). JEPD allows for the collaboration and active involvement that supports teachers' self-efficacy and motivation, leading to more student-centered practices (Polleck et al., 2021). Specific examples include co-teaching, mentoring, reflection, and discussions. For example, teachers could work together in book clubs or study groups (Desimone, 2009).

A common setting for job embedded professional development is within PLCs. Professional Learning Communities (PLCs) are structured time where teachers are able to

collaborate (Croft et al., 2010). When implemented well, a high-quality PLC improve teachers' praxis and support student learning. They are an opportunity for active collaboration and reflection. Teachers have an opportunity to analyze student work and work together. Collaborative time has become increasingly popular in schools. Collaboration supports change, especially when entire grade levels or departments work together toward a common goal (Darling-Hammond et al., 2017).

Student Outcomes

Professional development positively impacts student learning outcomes. For example, PD opportunities involving content-focus, models, and student work-analysis improved student scores on the written portion of a content exam (Darling-Hammond et al., 2017). Similarly, gains were seen in students whose teachers completed an early literacy coaching program (Darling-Hammond et al., 2017). In one study focusing on a lottery-based charter school that centers on literacy instruction drawing from both reading sciences and building student core knowledge, researchers found that students' long-term reading achievements improved significantly compared to students who did not win a spot in the lottery. But directly related positive student outcomes are not always the case.

PD does not always translate into positive student outcomes. In one study, PD impacted teachers' knowledge of reading instruction, but the PD interventions did not impact student test scores. While both the teachers' knowledge and the use of explicit instruction increased, there was no statistical significance in difference between the treatment and control schools (Garet et al., 2001). Garet et al. (2001) posited that teacher knowledge is not a good predictor of student achievement. There is a need for more research on how PD impacts student learning outcomes, including the best way to measure these outcomes.

Variety in Professional Development Quality

The overall quality of professional development offered to teachers varies based on the resources of the school, district, and the state the teacher is working in. Contexts around classrooms directly impact how effective PD is. For example, there is a greater variation in student learning outcomes between classrooms in a school than between schools or districts (Guskey, 2003). These factors directly impact the quality of the professional development teachers are being offered. For example, in one study, 79% of teachers participating in district-level PD were participating in traditional PD activities, which we know to be less effective than hands-on collaborative PD (Garet et al., 2001). Rubin et al. (2021) argue that teacher learning is complex and non-linear, and does not always fit into the top-down training models used for PD. The quality of the professional development varies by district, as seen in the format, focus, coherence, quality, and whether or not it is research based. District and school leadership directly influence teachers' knowledge and practice (Croft et al., 2010; Thomas, 2022) The quality of the PD also varies based on who is delivering it (Croft et al., 2010).

These factors mean the quality of the PD a teacher has access to depends directly on the school they are in. Teachers in struggling schools are pressured to teach formulaic essays and grammar skills, and they face more scrutiny regarding student learning outcomes (Smit et al., 2022). Another issue is that without time, funding, materials, or the appropriate technology, teachers cannot apply their learning to other contexts (Guskey, 2014). This means that even if they had access to high quality PD, teachers in schools that lack resources would not be able to fully realize the change or impact, whereas teachers in higher-performing schools have access to a richer learning environment. Some teachers have professional learning committees or interdisciplinary teams to collaborate and discuss student performance. They have access to

conferences, journals, and professional organizations. Professional development activities may be higher quality, and with these supports teachers are better able to create collaborative, authentic learning environments for students (Henderson et al., 2018). PD directly impacts preparedness, which also impacts teachers' feelings of self-efficacy. Teachers who report feeling well-prepared by their preparation programs have a higher self-efficacy; whereas teachers who report their preparation programs were less extensive, feel less prepared and have a lower self-efficacy (Knackstedt et al., 2017). In the end, this creates a divide between teachers who have access to growth and self-actualization, and teachers who do not.

Educational Training Centers in Kansas

The Kansas Association of Educational Service Agencies (KAESA) is the largest professional development provider in the state of Kansas. They are an organization made up of seven service centers: Essdack; Greenbush; Keystone; Northwest Kansas Educational Service Center; Smoky Hill Education Center; Orion Education and Training; and Southwest Plains. While KAESA was organized in 2014, the individual service centers date as far back as the late 1970s. Along with providing professional development to school districts, service centers also provide direct support and learning opportunities to students, including ESOL, Special Education, and early learning services, as well as alternative education programs. They also provide community and business programs. Professional development can look like online programs, classes, academy models, online resources, webinars, and mentoring. These services can be offered online or in-person. School districts across the state pay to access trainings from these service centers. (KAESA, 2025; Southeast Kansas Education Service Center, 2026).

Ineffective Professional Development

Educators are sometimes subjected to poorly developed or implemented PD. The one-off workshop model is common, but traditional PD does not give teachers the time, activities, and content needed for PD to be effective (Darling-Hammond et al., 2017; Garet et al., 2001; McMahan et al., 2019). Teachers need time to engage in activities over a sustained duration. Furthermore, PD opportunities can be fragmented with little follow up (Smith & Williams, 2020). Professional development topics may not be the ones that would best support teachers. Whatley and Smith (2023) describe PD on writing as too generic, when teachers need specific tools and strategies. Polleck et al. (2021) call for culturally sustaining PD that supports teachers in asset-based approaches. Teachers also need support with specific tasks. For example, teachers struggle translating assessment data into effective lesson plans (Beck et al., 2018). Similarly, bringing research-based principles into the classroom is difficult (Thomas, 2022). Even when teachers master the PD, this does not necessarily translate into gains in the classroom. For example, in one study, teachers mastered the PD, but only a quarter went on to implement more complex materials in their classroom. Ultimately, PD does not always lead to student success (Arshan et al., 2024).

Barriers to Professional Development

While teachers are willing to implement PD, there are also issues outside of teachers' control. They lack the time and autonomy to teach new curriculum, and they are often bound by the school's curriculum or pacing guide. They lack training to address students' needs, such as supporting English Language Learners, or they lack the resources needed to implement the PD. There are also systemic barriers to implementing effective PD such as accurately identifying the needs for PD, choosing effective approaches to PD, implementing the PD with quality and

fidelity, assessing outcomes, and lacking a shared vision (Darling-Hammond et al., 2017). In order for PD to be effective, districts and teachers must overcome these barriers.

Gaps in Literature and the effectiveness of Professional Development

Further research is needed as to the effectiveness of professional development in a variety of settings. For one, researchers do not agree on what defines PD as effective to begin with (Guskey, 2003). For example, McMaster et al. (2020) write that lack of detail in PD research makes it difficult to know what makes the PD effective. Research on PD typically consists of asking for the opinions of the teachers and educators, which is not supported by evidence (Guskey, 2003). Darling-Hammond et al. (2017) indicate PD initiatives may not be effective in creating long-term change. In a similar vein, while good professional development takes place over time, more time is not the only factor in making professional development effective, it also has to be organized and well structured (Guskey, 2003). The effectiveness of PD varies based on the teacher taking it. For example, teachers who are already credentialed, who start from a higher level of content knowledge gained more from their PD experiences, compared to their uncredentialed counterparts (Darling-Hammond et al., 2017). Understanding more about professional development will help better match effective practices to the teachers who need them.

McMaster et al. (2020) call for more intentional study of intensive interventions, as well as research into the lasting effects of PD. Even if PD is implemented with high fidelity, will teachers continue to main their skills long term? More specifically, there is a need for more research on how PD impacts student outcomes, and how these outcomes should be measured (Guskey, 2014; McMahan et al., 2019; McMaster et al., 2020). Ultimately the goal of

professional development is to support student learning, so collecting student data, while challenging, helps researchers better understand how effective that training is.

Teaching Contexts in Kansas

Teaching Experiences: Rural, Suburban, Urban

Rural Schools

In rural Kansas, the school is the community, and the community is the school. Rural schools attract teachers who want to live in rural communities. Rural teachers often want to stay in their hometown, a phenomenon known as the call of home. Teachers who are from rural communities may also be attracted to rural schools because the rural culture is familiar to them, even if they are not from that town. When teachers stay in rural communities, it is for the close relationships and for the respected place they hold in the community as a valuable member of the cultural hub (Liu et al., 2025).

Despite this close sense of community, rural schools face a variety of struggles. Rural schools are geographically isolated (Bradley & Feldman, 2021; Liu et al., 2025). Because of their geographic distance from teacher education programs, as well as the lack of services and amenities, it is not only hard to attract candidates, but teachers also feel social and professional isolation (Bradley & Feldman, 2021; Liu et al., 2025).

This geographic isolation causes rural schools to struggle with staffing both teachers and administration (Bradley & Feldman, 2021; Liu et al., 2025). Teachers are offered lower salaries, and they are often required to teach more than one subject and wear many hats (Liu et al., 2025; Rodriguez et al., 2025). Having smaller administration teams limits their ability to serve the school and their teachers (Liu et al., 2025). When rural school onboarded new teachers, they provided less support than urban districts and suburban districts (Johnson, 2009). Additionally,

rural teachers are less likely to have graduate degrees. They are more likely to be less experienced teachers, who then move towards more developed areas when they do gain experience (Liu et al., 2025).

Rural schools struggle with economic capital, as rural communities have limited economic resources and therefore smaller tax funding available to fund the schools. This leads to rural schools lacking the access to technology and materials that urban and suburban schools have (Liu et al., 2025). Bradley and Feldman (2021) found that educational research tended to “other” rural and urban schools, setting suburban schools as the yard stick to which rural and urban schools must measure up.

Suburban Schools

While untrue in Kansas, most children in the United States attend a suburban school. Suburban schools boast the highest test scores and graduation rates compared to other teaching contexts, and they are often associated with rigorous academic offerings such as honor classes, more opportunities, and success (Diamond et al., 2020; Miller & Schugurensky; 2024). Parents have also reported perceptions that suburban schools have higher expectations than previously attended urban schools. A longitudinal study sampling from children born at the same urban hospital, students who moved to suburban schools were more likely to be on track academically (Miller & Schugurensky; 2024).

Staffing is easier in suburban contexts for a variety of reasons. Historically suburban districts have been more affluent, with more access to funding and resources (Diamond & Posey-Maddox, 2020; Miller & Schugurensky; 2024). This ensures that suburban teachers have access to quality materials. Suburban schools have higher credentialed teachers (Castro et al., 2023; Miller & Schugurensky, 2024). As highly qualified teachers transfer and move away from urban

schools, suburban schools benefit from these transfers (Rodriguez et al., 2025). Teachers tend to move to the schools that are like the schools they grew up in, another example of the call home. Since most teachers are predominantly white and middle class, the call home leads them to suburban schools (Rodriguez et al., 2025). Suburban teachers also have reported having great administration, who led teachers in a strong organizational culture with teachers reporting feeling high morale. These positive cultures allowed for professional collaboration (Castro et al., 2023; Miller & Schugurensky; 2024).

While traditionally, suburban schools have been both affluent, and white, this is rapidly changing (Diamond & Posey-Maddox, 2020). Suburban schools are currently facing challenges as their demographics shift, and they welcome higher numbers of students of color, students who are immigrants, and students with greater needs related to poverty (Castro et al., 2023; Diamond & Posey-Maddox, 2020; Miller & Schugurensky; 2024). Suburban schools are not prepared to support the changing student demographic (Castro et al., 2023; Diamond et al., 2020; Miller & Schugurensky; 2024). Suburban schools reported growing too quickly, outpacing their ability to staff, or outpacing teachers' ability to adapt to larger class sizes (Castro et al., 2023, Diamond & Posey-Maddox, 2020).

Castro et al. (2023) challenge assumptions about the resources and working conditions in a suburban district, showing how these vary across building. Some suburban teachers reported not feeling they had had the same quality administration and access to resources that other schools in their district had. Schools within suburban districts vary widely in terms of racial identity and socioeconomic status, so the needs of individual buildings are different (Castro et al., 2023; Diamond et al., 2020). Suburban teachers also expressed concern that the school was too large to truly collaborate, and teachers did not always feel trusted by their central

administration or school boards. Suburban teachers felt pressure from testing (Castro et al., 2023). Adding to these challenges is the fact that suburban and rural schools are under-researched, as most educational research focuses on urban settings (Diamond & Posey-Maddox, 2020).

Urban Schools

Each teaching context is unique. Urban districts are often situated in thriving communities (Bradley & Feldman, 2021). Urban community connection is a powerful tool for education, and urban communities have much to draw on (Marco-Bujosa et al., 2020). Urban districts are sometimes connected, formally or informally, with universities to prepare preservice teachers, and this proximity to universities allows for an easier time staffing than in rural schools (Herman, 2023). Some urban districts are well resourced (Marco-Bujosa et al., 2020). Teacher salaries and per-student spending tends to be higher in urban districts (Rodriguez et al., 2025). Urban districts with resources provide high quality onboarding processes and support for new teachers (Johnson, 2009). With larger staff sizes, urban teachers reported being connected to their department and colleagues. This support from colleagues and the school helped them grow professionally and provided collaboration opportunities (Marco-Bujosa et al., 2020).

A deficit mindset and approach in education research tends to situate urban education as a problem to be solved rather than focusing on better preparing teachers for urban contexts (Bradley & Feldman, 2021; Marco-Bujosa et al., 2020). Teacher education programs fail to prepare novice teachers for supporting students in urban schools (Herman, 2023; Marco-Bujosa et al., 2020). When new teachers arrive in urban schools, they tend to have lower quality programs for new teacher support than suburban districts; although urban districts with more resources and fewer students in poverty provided better training than economically

disadvantaged urban districts (Herman, 2023; Johnson, 2009). Some teachers cited school culture and other colleagues as the reason they changed schools (Marco-Bujosa et al., 2020).

Similar to rural schools, urban schools struggle with funding if they are in an impoverished area with lower property-taxes (Liu, et al., 2025). Some urban teachers discussed not having enough resources, creating their own curriculum, and connecting their curriculum to their students (Marco-Bujosa et al., 2020).

Schools with fewer resources do not have the same access to high quality teachers. (Rodriguez et al., 2025) Teachers with lower performance indicators tend to work in the highest poverty schools, which also tend to be urban schools. Urban schools struggle more with teacher turnover as teachers with more experience and more education tend to leave urban schools to move to schools with more resources (Rodriguez et al., 2025). Teacher turnover is associated with difficult working conditions, such as high-class sizes and a lack of resources (Herman, 2023; Rodriguez et al., 2025). Even when schools are appropriately staffed, urban teachers reported the pressures of standardized tests hindered their ability to teach authentically (Marco-Bujosa et al., 2020). These differences in teaching directly impact students in Kansas.

Teaching in Kansas

In the 2024-2025 school year, there were almost 476,833 public school students in 1,268 schools across 285 districts being taught by almost 35,289 teachers. According to KSDE's report on enrollment, in the 2024-2025 school year seven school districts were in the most populated category (10,001-55,000 students). Breaking down this spread, Wichita is the largest of these with approximately 50,000 students in district. The next four districts (Olathe, Shawnee Mission, Blue Valley, and Kansas City) serve between 20,000-30,000 students. The final two schools in this most populated category (Topeka and Lawrence) serve between 10,000-12,000 students.

This illustrates that even between the seven most populated school districts in Kansas, there are huge discrepancies in the population served (KSDE, 2026).

By county, 85% of the counties in the state are rural (Institute for Policy & Social Research, 2024). Looking at the district population break down, the second most populated category included seven other school districts, serving 7,001-10,000 students. Seven more districts were in the third most populated category, serving 5,001-7,000 students. This means that 264 school districts serve fewer than 5,000 students, and for additional context, nine districts serve less than 100 students each (KSDE, 2026). The breadth of these district sizes illustrates the vast cultural and geographical differences in contexts between Kansas school districts.

To examine the 2023-2024 numbers in Kansas, Liu et al. (2025) use a multi-dimensional index called the CARR (Community Assets and Relative Rurality Index) to discuss rurality. While other measures of rurality consider population or distance to urban areas, the CARR index also assess access to services and amenities to give a fuller picture what living rurally is like. It measures both location and resources. The CARR index indicates that there is a large variation, even amongst rural areas, regarding their access to services and amenities (Liu et al., 2025). This means that the teaching contexts in Kansas, rural, urban, and suburban, vary greatly regarding their access to resources. Using the NCES data through the lens of their CARR index, Liu et al. (2025) find that of 286 districts, 10 are city, 12 are suburban, and 43 are town. This leaves 221 rural districts. While most children in the United States attend suburban schools, in Kansas most students are in rural school districts (Diamond & Posey-Maddox, 2020).

Sociocultural Theory and Literacy

I draw on both Vygotsky's (1978) sociocultural theory and Lewis et al.'s (2013) critical sociocultural theory as the theoretical framework for analysis in my research. Vygotsky's (1978)

sociocultural theory is a foundational educational theory that argues individuals engage with and learn from the world through social interactions. Individuals are developed by social, cultural, and historical activities (Rogoff et al., 1995). Lewis et al. (2013) build on Vygotsky's (1978) work arguing for the use of a critical sociocultural theory that includes issues of power, identity, and agency. A critical sociocultural theory is an important lens for literacy because, they argue, reading and writing are not neutral; rather the ideas in literacy and literature represent power-structures, demanding that one approach the work with a consideration of that power (Lewis et al., 2013). Wetzel et al. (2019) argue for using sociocultural knowledge to prepare teachers to teach literacy.

Social Interactions

Sociocultural theory argues that learning happens through social interactions, collaboration, and dialogue. Humans build their own social identity through this learning, as participants in their own existence. Vygotsky (1978) argues that learning is a mediated activity that humans use both language and tools to navigate. Therefore, humans learn through navigating new learning systems through their social interactions. (Vygotsky, 1978; Wetzel et al., 2019). Rogoff et al. (1995) explain that children learn through these sociocultural approaches.

Learning Contexts

Social interactions are shaped by their cultural and historical contexts. Because learning takes place in context, culture directly shapes learning. (Vygotsky, 1978). In fact, Lewis et al. (2013) draw on sociocultural theory in their literacy work because it “has allowed [them] to explore the intersection of social, cultural, historical, mental, physical and...political aspects of people's sense making, interaction, and learning around texts.” (p.2). Brown (2013) explains that

the very curriculum itself, the knowledge teachers set forth as accepted truth, itself becomes a cultural context in which students learn. Humans learn through processes, which happens within contexts, and these contexts cannot be separated from the process (Rogoff et al., 1995). Rogoff et al. (1995) write “Within sociocultural approaches, the aim is to understand the developmental processes involved in activities, at the level of individualized, interpersonal, and community (or cultural process)” (p.129).

Sociocultural Theory and Identity, Power, and Agency

Lewis et al. (2013) build on Vygotsky’s (1978) ideas about identity, arguing that agency is a “making and remaking of oneself” (Lewis et al., 2013, p.18). They argue that the mediation of symbol systems that takes place in learning happens within the cultural contexts, so we must critically examine those contexts. While identities are shaped by the social and the culture, identities in turn shape the social and culture, and power influences the discourse (Lewis et al., 2013). Wetzel et al. (2019) argue for a sociocultural framework that both connects student experiences with their identities and literacy teaching and asks teachers to examine their own cultural identity.

Lewis et al. (2013) go on to consider the role of power within discourse communities, and the way that power shapes learning in everyday systems. They write ““Learning shapes subject formation, which shapes identity enactments that allow for different types of agency. But the power of that agency still depends heavily on recognitions” (Lewis et al., 2013, p. 20). Conversely, Wetzel et al. (2019) found that misunderstanding power dynamics was a barrier to understanding language dynamics through a sociocultural lens.

Learning and Activity

Lewis et al. (2013) draw on activity theory, which argues that to understand an activity, one must understand its goals. By bringing these theories together into a critical sociocultural theory, Lewis et al. (2013) argue they can better engage with the everyday learning systems of education, with special attention to identity, power, and agency. Similar to Lewis et al.'s (2013) use of activity theory, Rogoff et al. (1995) argue that learning happens through activities, which are contextualized within cultures. These activities also provide a unit of analysis, allowing research to focus on the entire unit for study and generalization.

Drawing on the complex questions of identity, power, and agency raised by Vygotsky (1978) and continuously answered by other scholars utilizing the sociocultural theoretical lens (Lewis et al., 2013; Rogoff et al., 1995; Wetzel et al., 2019), I have explored and analyzed the multidimensional and layered landscape of secondary literacy professional development in Kansas. This landscape is complicated by the vast differences in teaching contexts: urban, rural, and suburban, in Kansas, each coming with its own strengths and challenges. As shown above, the topic of literacy is both fraught with politics and academically complicated. It turns out it is hard to teach people to read. Even when professional development is effective, it is not always available. The task seems Sisyphean, yet teachers across the state are willing to push the boulder up the hill.

Self-Efficacy

Ideas about self-efficacy pair with sociocultural theory, as self-efficacy is tied to closely with power, agency, and identity. Self-efficacy is one's estimation of one's ability to organize and complete the steps needed to achieve a specific outcome. It depends on how well one believes could accomplish something in the future (Bandura, 1997). Self-efficacy is unlike self-

worth, confidence; self-esteem; or competencies, rather it is based one's estimation of one's capability within a certain condition (Bandura, 1997; Maddux & Gosselin, 2011). People respond to environmental events, and their ideas about their own capabilities, their own self-efficacy, is dependent on the context they are operating in (Maddux & Gosselin, 2011). Important to note, self-efficacy is not an intention to act, but merely the estimation that one could act (Maddux & Gosselin, 2011).

People are able to cultivate their self-efficacy (Bandura, 1997). As people believe outcomes are within their power or control, they are more likely to take action. People are more likely to pursue their goals and face adversity if they believe they have control over the events. In this way, self-efficacy is tied to motivation, self-efficacy directly impacts student scores, as when teachers believe they can raise students' test scores, test scores improve (Bandura, 1997; Tschannen-Moran & Johnson, 2011). Self-efficacy is an important cog in a score-improvement machine. When teachers have high self-efficacy scores improve; when scores improve, teachers' self-efficacy improves, their motivation improves, and the scores improve (Tschannen-Moran & Johnson, 2011).

Self-efficacy can be cultivated through observing others being successful and seeing success in one's own students (Bandura, 1997; Maddux & Gosselin, 2011). While self-efficacy tends to be set earlier in one's career, researchers have found they can improve self-efficacy beliefs (Bandura, 1997; Tschannen-Moran & Johnson, 2011). Seeing students' test scores improve and follow-up coaching had the biggest impact on improving self-efficacy (Tschannen-Moran & Johnson, 2011). Self-efficacy is not tied to beliefs about one's students in terms of socioeconomic status or ability levels, instead it is a teacher's own idea of how they can impact students, and their scores (Benz et al., 1992; Tschannen-Moran & Hoy, 2011).

Self-Efficacy in Groups

Self-efficacy is context specific, as people take into account their own context when determining if they can accomplish a goal (Bandura, 1997). Self-efficacy depends not just on possessing the skills to complete a task, but rather, to have the ability to organize those skills together (Bandura, 1997). Because self-efficacy is so context specific, self-efficacy is tied to culture. As teachers consider their own efficacy, they are considering their ability to accomplish a task or goal within the specific contexts of that school. Therefore, the collective efficacy of the school and the school culture directly impacts teachers' feelings of self-efficacy (Bandura, 1997; Maddux & Gosselin, 2011).

To accomplish goals as an organization, the individual members must believe the group has the capacity to accomplish the goal; this is their collective self-efficacy (Maddux & Gosselin, 2011). The collective efficacy is a community's belief that it can create change. Organizations much coordinate their efforts through motivation, planning and decision making, as the group works together to reach a goal. (Bandura, 1997; Maddux & Gosselin, 2011). Therefore, cumulative resources, quality of curriculum, school climate, and leadership, all impact teachers' assessment of their collective efficacy (Tschannen-Moran & Johnson, 2011). Self-efficacy in people and in groups is important because belief that one is capable of accomplishing a goal impacts one's willingness to take the necessary steps to accomplish the goal.

Chapter 3 - Methods

This chapter focuses on the methods used in this study. I present my research questions, as well as my research design and procedures. The research used a convergent parallel mixed methods approach (Creswell & Plano Clark, 2018). This chapter looks at the contexts of the larger grant-funded research project I drew my data from: the sampling, instruments, data collection, and analysis. Finally, this chapter explores the rigor of my study.

My dissertation research analyzed a subset of data collected through a grant-funded research project conducted at a public research university in the Midwest. In 2024, this project set out to address the needs present in the state of Kansas regarding adolescent literacy. The project partnered with secondary teachers across the state of Kansas to provide missing research and resources on secondary literacy in the state. The project captured the literacy landscape and teaching contexts for secondary English teachers across the state of Kansas, with the goal of providing resources and support to Kansas teachers.

The grant-funded research operated across several phases. During the data collection phase, secondary English teachers across the state of Kansas were asked to participate in an extensive qualitative and quantitative survey. Teachers were asked to share about their teaching practices, their curriculum, their teaching contexts, and their access to resources. Responders were also asked if they were interested in participating in follow up interviews. This survey was followed up with two rounds of interviews. During these interviews, teachers were asked to expand upon their survey answers, describing their background, their experiences with specific literacy practices, their access to texts, their experiences with professional development opportunities, and their experiences with English Language Learners.

During the literacy summit and collaboration phase, a small cohort of expert English teachers, in a variety of stages in their career, gathered over the summer to collaborate, create, and share their curriculum. The resources created during this collaborative summit informed work to create readily available curricula for teachers in the state of Kansas. Because the curricula were created in response to the needs of teachers, it addressed their specific and immediate needs.

I served as part of the grant team throughout the research phase. I contributed to the survey development, assisted with survey distribution, recruited for follow-up interviews, conducted interviews, and helped coordinate and host the summit. My dissertation research draws from a small portion of the collected data. I am specifically exploring the role of professional development in addressing teachers' literacy needs at the secondary level.

Research Questions

When teachers complete their educational preparation programs and begin teaching, they continue to need support as they develop their professional praxis and pedagogy. As the current conversation in education focuses on high stakes testing, the Science of Reading, and structured literacy, there is a pressure to support students' literacy skills (Foster et al., 2024). However much of the support and resources supporting literacy instruction centers early readers and primary teachers (Davis et al., 2018; Foster et al., 2024; Savitz et al., 2019). Secondary teachers also need support (Davis et al., 2018; Lillge, 2019; McMahan et al., 2019; Ray et al., 2024; Thomas, 2022). School districts are a main source of professional development for teachers, often serving as gatekeepers to PD opportunities. Therefore, teaching context directly impacts the quality of PD teachers are offered (Castro et al., 2023; Miller & Schugurensky; 2024; Thomas, 2022).

The aim of this study was to describe how in-service secondary English teachers describe their literacy related professional development opportunities, barriers, and the ability to apply and use their literacy skills within rural, suburban, and urban contexts.

To achieve this goal, my research is guided by the following questions.

- 1 How do secondary Language Arts teachers experience literacy professional development in rural, suburban, and urban contexts?
- 2 How do secondary Language Arts teachers describe their opportunities for professional development related to literacy topics?
- 3 How do secondary Language Arts teachers describe the barriers for professional development at the secondary level in regard to literacy training?
- 4 How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?

Researcher's Positionality

Bloomberg (2023) reminds us that a researcher's identity impacts their perceptions. Although I taught English at both the high school and middle school level for 10 years, I am not confident I could teach someone to read. I acknowledge that in some ways this research may be an interest I have in righting wrongs of the past. I wonder if I could have been a better teacher if I had known more, if I would have been better prepared to teach literacy skills in the classroom, if I could have served more students. I approach this work as an educator who is passionate about literacy. I believe in the power of literacy, and the power of education. I am also an educator who has participated in a variety of professional development opportunities with varying levels of applicability to my own classroom.

I acknowledge my former position in K-12 education biases me towards teachers. Bloomberg (2023) explains that “accepting that what is perceived in the workplace or social community as reality is socially constructed, positionality will significantly influence the decisions made during each cycle of the research process” (p.138). My positionality may lead me to believing the best in my participants’ stories and in their efforts, and I may be biased against faceless institutions responsible for preparing them for literacy education, such as educational preparation programs or the nameless organizers of professional development days. I may be overly hopeful that arming teachers with higher quality tools will directly impact student success.

Ultimately, the researchers make meaning of participant experiences (Bloomberg, 2023). It is imperative to acknowledge, voice, and be transparent about positionality. I acknowledge my positionality to practice reflexivity, which guards against researcher bias. Researcher bias is essentially the researcher finding what the researcher wants to find (Johnson & Christensen, 2012). Reflexivity is a process researchers can use to consider how their positionality shows up and affects their work. Researcher’s reflexivity allows them to reflect critically on their personal assumptions and choices (Braun & Clarke, 2022).

As part of this reflexive process, I can also acknowledge that subjectivity can be an asset in qualitative research. Research subjectivity serves as tool for completing analysis, rather than a bias to get rid of, which would be impossible. Reflexivity allows for quality analysis (Bloomberg, 2023; Braun & Clarke, 2022). Because I can relate to our participants, I feel empowered to tell their story. Working as part of a grant team gave me the opportunity to talk through these experiences as part of my reflexive practice. Collaborative coding enhances reflexivity as researchers negotiate for consensus (Bloomberg, 2023; Braun & Clarke, 2022; DeCuir-Gunby, et al., 2011).

Research Design

The purpose of this study is to describe the landscape of secondary literacy in the state of Kansas, specifically to capture teachers' experiences with literacy strategies and their access to resources to support their professional development in improving their literacy praxis. My work is informed by a pragmatic worldview. This research is completed in context, which is important in a pragmatic worldview. The flexibility of both pragmatism and mixed-methods allows for multiple methods and worldviews (Creswell, 2014). I am interested in the lived experiences of teachers within their daily lives of school, and I explore their interactions with and applications of literacy, as well as the professional development they encounter. This work employed a mixed-methods design.

Convergent Parallel Mixed-Methods Design

I utilized a convergent parallel mixed-methods approach, where both qualitative and quantitative data is utilized (Creswell & Plano Clark, 2018). Quantitative work allows measuring constructs and conducting group comparisons, but it can lack the context surrounding real-world applications (Creswell, 2014). Qualitative work allows for a holistic approach, giving rich details and narrative explanations, but it can be limited by a small sample size. A mixed-methods approach gives the best of both, providing a more complete understanding, as qualitative results provide further explanation of quantitative results, and vice versa (Castro et al., 2010; Creswell, 2014). In this research, my quantitative work allowed me to paint a picture of the general landscape of literacy professional development for secondary English teachers, while the qualitative work allowed for a deeper dive into personal experiences, giving a narrative account of professional development in the literacy landscape today. Mixed-methods approaches provide a complete understanding or an overall conclusion that cannot be found using only a quantitative

or qualitative approach (Tashakkori & Teddie, 2008). Because painting a complete picture was my goal, I chose the mixed-method approach.

This research design is a convergent parallel mixed-method design, as the data was collected on a concurrent timeline. The quantitative and qualitative data were collected on the same survey, and the interviews were conducted shortly thereafter. The quantitative data was not analyzed before moving on to the qualitative phase (Castro et al., 2010; Creswell & Plano Clark, 2018). More specifically, this work is concurrent triangulation, as the goal of the qualitative and quantitative data is to accurately describe the variables (Castro et al., 2010).

The dissertation research drew from two phases: 1) a general mixed-methods survey and 2) a follow-up qualitative interview with a smaller group of participants. The survey allowed for a quantitative accounting of teacher self-efficacy regarding literacy, as well as a qualitative description of trends, attitudes, and opinions regarding literacy training. The follow up interviews allowed for a deeper conversation about daily practices, curriculum, and experiences of secondary English teachers with professional development (Creswell, 2014).

During data analysis, I used a convergent mixed methods approach. In this approach, after qualitative and quantitative data are both collected, the data is analyzed separately and presented separately in the findings section. In the discussion section, the results are interpreted as they come together, and contradictions are further explored (Creswell, 2014; Creswell & Plano Clark, 2018).

I used thematic analysis as theoretical framework for analysis (Braun & Clarke, 2022). I used sociocultural analysis based on Vygotsky's (1978) and Lewis et al.'s (2013) work as a theoretical framework in the discussion. As a secondary structural model framework to analyze the experiences teachers report having with literacy professional development, I used the

National Reading Panel's work on literacy (Shanahan, 2005) as well as a framework based on Guskey's (2003; 2014), Desimone's (2009), and Darling-Hammond et al.'s (2017) work on professional development. While not traditional frameworks, I chose these scholarly works to serve as a supplementary structural model because their data is grounded in teacher practice, and bringing in these practical frameworks allows me to directly evaluate teachers' reported experiences within their praxis.

Selection of Participants

To accurately capture the state of literacy, the larger grant-funded research study sought to connect with a wide variety of secondary English teachers across the state. To participate in the survey, respondents needed to be actively teaching secondary English Language Arts (grades 6-12) in a classroom in the state of Kansas. Respondents provided informed consent for both the survey and the follow up interviews.

We first sent the survey to teachers who had graduated from K-State. The contact information was provided by the Kansas State Department of Education. We started by sending the survey to about 400 people, and we only had 17 surveys returned. Then we sent the survey to teachers across the state with emails available on school websites. If emails were not visible on the school website, we sent the survey via communication portals housed on the school websites. The initial message explained the purpose of the research, offered a \$50 honorarium, and provided a link to the Qualtrics survey. We sent reminders in the hopes of attracting more participants.

As the survey distribution continued, we targeted counties without respondents for both website scraping and email follow-ups. We reached every school district in Kansas, sending

approximately 1500 messages; we received 281 survey responses from 65 out of the 105 counties in the state. Of the 281 survey responses, 185 were legitimate, usable responses.

As part of the survey, teachers were then asked if they would like to participate in a follow up interview. Our goal was to gather a wide range of experiences from across teaching contexts in the state, reflective of the state's population. To this end, we used a stratification of the population for survey collection and recruitment for the follow-up interviews (Creswell, 2014).

After the initial survey, 64 people responded to a linked survey asking for contact information to receive the thank you stipend. At this time, they were asked to participate in a follow up interview. Fifty-one teachers indicated they would be interested in participating in a follow up interview. We sent a follow up email to all 51 teachers. We heard back from 21 teachers who committed to being interviewed. While working with 21 people to schedule interviews, some dropped out. We relied on the stratification sampling to prioritize select participants to ensure a variety of geographic locations were represented (Creswell, 2014). When we had a representative from each of the 6 regions in Kansas, plus Wichita and KC, we felt we had a saturation point. Braun and Clarke (2022) recommend considering the richness of the data when deciding on saturation. This variety ensured rural, urban, and suburban contexts would be represented. The first round of follow up interviews had 14 participants; 11 participants returned for the second round.

Sample

Quantitative Sample

The quantitative data for this dissertation included 11 closed-ended Likert questions focusing on self-efficacy. From the 185 legitimate survey responses, 160 people responded to the Likert Questions.

Qualitative Sample

The qualitative data I used for this dissertation research, included one open-ended survey question and unitized data from the follow-up interview. From the 185 legitimate survey responses, 158 people responded to this open-ended survey question. Of the 14 participants who started our follow-up interview process, 11 continued to the second round of interviews, where I drew my data from.

Instruments

Survey

For the larger research project, the survey captured the landscape of secondary English Language Arts teaching contexts and teachers' experiences across the state of Kansas, with special consideration to preparation and efficacy. The survey consisted of three components, made up of a total of 99 questions. The first component asked for teachers' demographics, teaching area, grade level, school locale, and curricular information. The second component was closed-ended Likert scale questions regarding teacher self-efficacy. The third component consisted of qualitative questions building upon the Likert questions, asking teachers to describe general experiences and feelings about literacy and curriculum in Kansas. Qualitative questions also centered around topics from Shanahan's (2005) National Reading Panel Report topics. The chosen topics painted a broader landscape of secondary teaching in the state of Kansas. The survey was distributed through Qualtrics.

To develop the Likert questions used for this dissertation research, we began with Tschannen-Moran and Johnson's (2011) Teachers Sense of Efficacy for Literacy Instruction Scale (TSELI). This scale, which has been established and revalidated with the present population (described below and see the appendix), was developed to measure teachers' self-efficacy beliefs for literacy instruction. For this dissertation, I used 11 of these Likert scale questions.

Qualitative Interview Protocol:

For the larger research project, we used semi-structured interviews as a follow up to the survey. The goal was to hear personal experiences and rich descriptions of literacy teaching contexts, as well as to follow up on the National Reading Panel topics, as they appeared in schools. The protocol started with general questions about the teacher's school, teacher preparation program, and their approaches to English instruction. The next set of questions asks about the ELA/ English curriculum at their school and the process for choosing it, which then rolled into questions about selecting instructional texts. The protocol next asked questions about how reading took place in their classroom. The next sets of questions went into vocabulary and reading comprehension questions, and then writing was addressed. The final set of questions asked about English Language Learners. One final question asked about cell phone policies, as this survey and interviews were being implemented at a time when several large school districts banned cell phones, eventually leading to a state-wide ban.

For my dissertation research, I drew from the second round of follow up interviews, which focused on professional development experiences and experiences with English Language Learners. The professional development questions were developed based on Guskey's (2003; 2014), Desimone's (2009), and Darling-Hammond et al.'s (2017) work on PD. The questions

also asked for teachers' experiences with Science of Reading. The ELL questions asked for specific strategies and adaptations teachers made for English Language Learners in their classroom, as well as probed for instructional opportunities teachers wished they had. Please see the appendix for the protocol.

Data Collection

Data collection began in early May 2025, with the hopes of catching teachers before they left for the summer. As this was a convergent parallel design, where data collection happened concurrently; the Qualtrics survey first collected quantitative and qualitative data (Creswell & Plano Clark, 2018). From there, participants were recruited to participate in follow up qualitative interviews, which took place in mid-June. A second round of follow up qualitative interviews were conducted in late October, early November.

Before coding could begin, I organized my data for easier management for my own dissertation research (Bloomberg, 2023). I first narrowed the data set to focus on my specific research questions. To utilize a mixed methods approach, I first identified which data I intended to analyze and how that data would be analyzed (Johnson & Christensen, 2012). To move forward, I unitized the qualitative data. Lincoln and Guba (1985) suggest finding chunks of meaning, explaining that units should be heuristic, and they should be the smallest amount of data that can stand on its own to best answer my questions. Establishing units of analysis before our coding process began contributed to our construct validity, as it provided a clear operationalized unit of measurement for our analysis (Lincoln & Guba, 1985). This validity measure ensured consistency and accuracy as we unitized the data into a smaller working data set. Please see the sections below for a more detailed accounting of this process.

In order to identify the specific survey questions that would best answer my research question and to unitize the interview data, I worked with my major professor, and then in a second meeting, I worked with the PI and the other coders on the project. I ensured credibility through internal validity by working with both my major professor as a person outside of the project and with the other coders to ensure a group consensus on the unitized data (Harry et al., 2005; Lincoln & Guba, 1985). Once my data set was established, this was reviewed with the PI, then with the major professor, and then with the group.

Survey

As described, we collected 281 responses, of which 185 were usable. Our survey responses represented 65 of the 105 counties. The quantitative dataset for this dissertation included, from the survey, 11 closed-ended Likert questions asking teachers about their feelings of self-efficacy regarding literacy topics; 160 people responded to these questions. For qualitative analysis from this survey, I included one open-ended, qualitative survey question asking “Have you received literacy specific training or professional development? If so, who provided this training and how often did this training occur? If not, would this be beneficial to you?” There were 160 responses to this question.

We treated each response as its own unit of data for analysis, allowing each participant’s voice to be heard. Each response was the smallest unit of data that could stand on its own. Additionally, treating each participant’s response as its own unit of analysis better allowed for comparison in frequencies across rural, urban, and suburban participants. (Lincoln & Guba, 1985). The average response was 32 words, with the longest response being 140 words. For example, one complete response that would represent one unit of data was, “No, and I’m sure it would be beneficial to an extent. The problem that I often find is that there might be great, new

ideas out there. But so many times as teachers we are just trying to keep our heads above water, so there isn't much time to delve into new instructional strategies.” This allowed us to then code each of these units of analysis individually.

Follow up Interviews (Round 1)

Fourteen people participated in follow up interviews. They represented the 8 regions in the state (6 regions plus Kansas City and Wichita). The interviews were 60-minute semi-structured interviews conducted over Zoom in Mid-June. The PI of the grant conducted the first interview, which was then viewed by the other interviewers for norming purposes. The other 13 interviews were conducted by a total of three other researchers, including myself. Participants were given an additional \$50 thank you for their time. All interviews were recorded by Zoom and stored on the Zoom cloud behind password protection. For the purposes of this dissertation research, we did not use units of analysis from this round of follow up interviews.

Follow up Interviews (Round 2)

In mid-October, the 14 interviewees were asked to participate in a follow up round of semi-structured interviews, and 11 participants continued to the second round of interviews. Another researcher and myself conducted these interviews on Zoom. All interviews were recorded by Zoom and stored on the Zoom cloud behind password protection. The second round of interviews focused on teacher experiences with professional development and English Language Learners. Again, participants were given an additional \$50 thank you for their time.

For the dissertation, I unitized data from the interview that focused on the Science of Reading, other literacy training, and resources and supports (Lincoln & Guba, 1985). Each participant's response to the following interview questions were treated as its own units of analysis:

1. Describe your experiences with Science of Reading, your personal experiences, any professional trainings, and ways it has impacted your classroom, if at all.
2. Describe Professional Development training you have had on literacy specific topics.
Have you been trained on the Science of Reading?
3. What impact or connection does your teaching context (ie, your school district, your school, access to resources, etc) have on your PD opportunities, as you understand them?

For example, one unit of analysis, in response to the first question would be:

So I started at this job. This is my fifth year in my current district. And when I began here, I, I was the reading specialist, and I hadn't done that before. My background is in college teaching, well, some high school, but a lot of college. So that was that was strange for me. You know, you go from teaching the college level to teaching beginning readers, really. And that's, that's the difference. So I spent my first couple of years probably, attending a lot of Greenbush trainings. Are you familiar with Greenbush?

So attending lot of those trainings and trying to wrap my head around what structured literacy is, and, I was having problems because a lot of those trainings were geared towards elementary students, and I was just having a hard time understanding how to adapt what I was learning, to my high school students. So, I, our 912, reading specialist here, among other things, and let's see, beyond that, I'm also I'm a student at K-State right now. I'm going after a, PhD in curriculum and instruction with a, endorsement and, reading specialists. So that's been really helpful. I've, I've gotten to learn a lot of the theory that I was missing before and before I learned all sorts of practices that would work for elementary students, but I didn't understand how to adapt them. And then now that I'm learning the theory, I'm in my second course right now, for the Reading Specialists endorsement. Now that I'm learning the theory, it's a lot easier to understand how to adapt those. What what sorts of things would work at my level and why, yeah, I think that's and then I had done a bunch of reading online, early on. And I wasn't yet, as is kind of about the same as the Greenbush trainings. Not not super applicable to me.

While the unitized data was analyzed, we also scanned both interviews for the same demographic data that was reported in the surveys. For example, we pulled information regarding years of teaching, teaching contexts, gender, etc. After the survey and interview data was appropriately unitized, we moved on to data analysis.

Data Analysis

To analyze the data, I first worked to upload the data for the entire grant-funded research project into a Computer Aided Qualitative Data Analysis Software (CAQDAS). We selected a CAQDAS for its ease of use and organization to support our team coding (Saldaña, 2021).

Saldaña (2021) explains that there is no one best software, and that researchers should choose based on their own project. We chose MAXQDA due its trustworthy reputation, its ability to handle large datasets, its team-based capacity, and its ease of use in a mixed-methods approach.

Saldaña (2021) also suggests learning about the CAQDAS system before beginning the project. To prepare for using MAXQDA, I consulted MAXQDA's handbook and training videos. I met with another graduate student who demonstrated her own use of MAXQDA. I attended a live training session from MAXQDA, and I met one-on-one with a MAXQDA representative for a question and answer and demonstration. Throughout the project I continued to consult MAXQDA's official handbook and training videos.

To begin the analytical process, I had to clean the survey data to import into MAXQDA. This is a pivotal stage, as the data needs to be selected and formatted correctly to work within the CAQDAS system (Saldaña, 2021). I started with 281 responses in Qualtrics. Qualtrics captured all surveys if they were started, even if they were abandoned. Therefore, I developed a protocol to decide which of the 281 surveys I would proceed with.

The first question asked if the participant was currently teaching 6-12th English/English Language Arts in Kansas. If they answered no, or if the survey was abandoned before this question was answered, I removed it. I deleted 35 responses and had 244 responses remaining.

Next, I looked at the duration. Since this was a 99-question survey, I decided to remove any responses that were less than 300 seconds (5 minutes). I removed 29 responses and had 215 responses left.

Qualtrics uses Google's bot detection technology and produces a ReCAPTCHA score. The score ranges from 0 to 1. Qualtrics indicates that a score under .5 is likely a bot (Qualtrics, 2026). For any responses scored under .5, I read through the responses myself to evaluate for a bot answer. I looked for local references that would indicate a person was familiar with teaching in Kansas, such as references to local PD, local co-ops, local university, or university programs. I also looked for what felt like authentic experiences, based on my own experiences as an English teacher. I removed four responses, and each potential bot only had answered one question. I was left with 211 responses.

I then examined progress through the Qualtrics. I had 155 complete responses, and 56 partial answers. I kept the 155 complete responses, and I reviewed the 56 partial answers. If the partial answer was 36% completed or less, I removed it. I found that at 36% complete, answers were just the demographic questions and one answer, sometimes two answers. I removed 26 of the partial answers and finished with 185 responses. Responses had to be moved into Excel to be formatted correctly and then could be uploaded into MAXQDA. To successfully upload the survey into MAXQDA, I had to identify the questions as demographic, variable, qualitative, or quantitative.

After the survey was uploaded into MAXQDA and ready for coding, I moved on to the interviews. The first round of interviews were transcribed via Zoom. The Zoom transcripts and videos were uploaded into MAXQDA, allowing researchers to quickly check for accuracy in the transcript. The second round of interviews were not transcribed by Zoom. These were

subsequently transcribed by MAXQDA, and videos were uploaded, again allowing users to check for accuracy in the transcript. Participant names were removed from transcripts. I also completed attribute coding on the survey and interview data to ensure I had the demographic information captured in the MAXQDA system (Saldaña, 2021).

Quantitative Approach

My quantitative analysis involved analyzing the Likert-scale self-efficacy responses and a quantitative analysis of the frequency of codes from the qualitative work:

H₀₁: There is no relationship between the dependent variable self-efficacy levels regarding general literacy topics and the independent variable of teaching context: rural, urban, or suburban.

H₀₂: There is no relationship between the dependent variable self-efficacy levels regarding the five pillars of literacy topics and the independent variable of teaching context: rural, urban, or suburban.

H₀₃: There is no relationship between the dependent variable of code frequencies regarding literacy professional development topics and the independent variable of teaching context: rural, urban, or suburban.

I used MAXQDA to analyze the responses, first reporting the mean scores. I ran an ANOVA to look for differences in self-efficacy levels in teaching contexts (Creswell, 2014). I then used MAXQDA to run a quantitative analysis, a Chi Square Analysis, on the qualitative code responses from the open-ended survey responses to look for differences in code frequencies based on teaching contexts (Johnson & Christensen, 2012). I did not run a Chi Square Analysis on the interview code frequencies due to the small sampling size.

Qualitative Approach

Foundational Theoretical Framework: Thematic Analysis

For the qualitative approach, the theoretical framework I used is Thematic Analysis. Thematic Analysis is a search for patterns (Bloomberg, 2023). It is broad and flexible, allowing it to work with a variety of theories and respond to a range of research questions (Lester et al., 2020). Additionally, because my work rests in the lived experiences of the classroom as reported by teachers, the flexibility of thematic analysis allowed room for that lived experience to be captured. I drew on Braun and Clarke's (2022) six phases for Thematic Analysis, which involved familiarizing myself with the data, coding, searching for themes in the codes, reviewing themes, defining the themes, and finally writing up. While searching for themes, I specifically organized by research questions. I also reviewed my themes with the research team, as they had been such an integral part of the coding process. Please see table 3.1 for an explanation of those my frameworks work together.

Conceptual Framework for Analysis: Sociocultural Theory

Sociocultural Theory serves as my theoretical framework for analysis. Vygotsky's (1978) sociocultural theory puts forth that learning takes place through social interactions. Building on Vygotsky's (1978) work, Lewis et al. (2013) "aim...to generate a sociocultural theory that accounts for these larger systems of power as they shape and are shaped by individuals in particular cultural contexts" (p. 9).

I specifically utilize sociocultural theory to explore how teachers describe their barriers, as well as their agency and autonomy across contexts its accounting of identity, power, and agency. Lewis et al. (2013) write, "we do not see agency as stemming from an internal state of mind, but rather a way of positioning oneself so as to allow for new ways of being, new identities" (p.4-5). They explain "Power circulates to afford degrees of agency that resist

structural constraints, and, at times, lead to transformative practices” (Lewis et al., 2013. p. 4).

The lens of sociocultural theory allows space for considering how teacher agency and identity interplay as secondary language arts teachers consider their identity as literacy instructors.

Furthermore, I consider secondary language arts teachers’ experiences with barriers and power structures within their contexts, as they navigate, or fail to navigate, the transformative practice of literacy instruction.

Supplementary Structural Model:

I used two supplementary structural models to further analyze and contextual professional development experiences in different teaching contexts. These models allowed me to examine research questions 1 and 2, which ask how teachers experience literacy professional development, and how they describe their resources, assets, and needs. I drew on a professional development framework, as well as Shanahan’s (2005) National Reading Panel Report s to guide my work.

I drew from Darling-Hammond et al. (2017), Desimone (2009), and Guskey’s (2003; 2014) work to create one framework to use to evaluate the professional development opportunities that teachers encounter. After extensive research in the professional development field, these researchers have developed a framework for evaluating effective PD. Effective professional development opportunities are content focused, involve active learning, give participants an opportunity to collaborate, offer coaching opportunities, have opportunities for reflection and for feedback, and have a sustained duration (meaning they take place over a period of time, giving teachers the opportunity to apply the PD, reflect, and make changes). Effective PD also has a coherence between the PD topic and the goals and beliefs of the teacher (Darling-Hammond et al., 2017; Desimone, 2009). I also turned to Guskey’s (2003; 2014) work on

planning successful PD. Guskey (2003) suggests when planning successful PD, organizers should ask what impact they would like to ultimately see on learners, and how they will know if the PD has been effective. They need to know what supports and resources people need, what knowledge and skills teachers need to develop, and finally what activities and trainings will lead to these skills and knowledge (Guskey, 2003). By turning to these qualities of effective PD, I was able to discuss how teachers' reported experiences aligned or did not align with ideal professional development scenarios.

I also turned to Shanahan's (2005) National Reading Panel Report to serve as a conceptual framework to inform my evaluation of literacy topics in the secondary classroom. Although it is not a traditional conceptual framework, I believe its practicality and grounding in teachers' work make it appropriate for evaluating and interpreting teachers' shared experiences with literacy in the secondary classroom. The National Reading Panel report was commissioned in response to the reading wars (Shanahan, 2005), so I believe it is fitting to use it again to evaluate teachers' experiences in a Post-Science of Reading world. The report gives attention to phonemic awareness, phonics, oral reading fluency, vocabulary, and comprehension strategies. Each topic offers a definition, a discussion of how to improve reading instruction, advice and information for teachers instructing on the topic. I use this as a basis to consider teachers' reported experiences with literacy instruction in the classroom. These two supplementary structural models informed my discussion regarding research questions 1 and 2 to consider how experiences with professional development and literacy topics varied across teaching contexts.

Table 3.1 Interconnected Frameworks

Framework	Foundational Theoretical Framework	Conceptual Framework for Analysis	Supplementary Structural Model
Framework Name	Thematic Analysis	Sociocultural Theory	National Reading Panel Report

			Professional Development Framework
Researchers	Braun and Clarke (2022)	Vygotsky (1978) Lewis et al. (2013)	Shanahan (2005) Darling-Hammond et al., 2017; Desimone, 2009). Guskey's (2003; 2014
Summary	Six phases of thematic analysis: 1. Familiarization with the data 2. Generate codes 3. Generate themes 4. Review themes 5. Define themes 6. Write the report	Learning happens through social interactions. Learning cannot be separated from context, so learning is shaped by cultural and historical contexts. Identity, power, and agency are interconnected.	Five Pillars of Literacy Framework for effective PD
Use in my Research	This framework informs my analytical process. I draw on their six phase analysis to code and theme my research.	This framework informs my discussion. I draw on Sociocultural Theory to analyze my findings as I explore how power, identity, and agency interplay with access to professional development across contexts	This supplementary structural model helps inform my discussion of the quality of the PD teachers report receiving across content. I discuss the PDs alignment with the five pillars of literacy and best practices for PD.

Coding Methods

When transitioning from the data collection under the larger research grant to data analysis specific to my dissertation research, I worked with a team of two other GTAs along with our PI to code my data as part of a collaborative coding process (Saldaña, 2021). Saldaña (2021) suggests teams have no more than 5 people and meet regularly. Our team had 4 people. We met once a week for about 2 hours at a time for about 6 weeks.

As a team, we opened coded using descriptive coding. We used an inductive approach, which is data driven and bottom up. This allowed the participants in my study to speak for themselves (Bloomberg, 2023; Williams & Moser, 2019). We started with descriptive coding in the survey data to give us a sense of what was out there. Saldaña (2021) suggests descriptive coding for larger data projects. This allowed us to bring a more established codebook to the surveys because we had a better sense of how people may engage with this topic. For example, open coding allowed us to establish basic categories such as the existence of training, general attitudes towards training, who was providing training, who was seeking training.

In addition to descriptive coding, we used open or free coding, allowing us to remain open to any responses. Open coding allowed for exploring ideas, creating codes and concepts. During initial coding, we allowed for the use of IN vivo coding to capture our participant's actual voice (DeCuir-Gunby et al., 2011). For example, "Bang for your buck" was an IN vivo code that grew to encompass a broader idea of professional development needing to hold value to be worthwhile. IN vivo coding is appropriate for studies that center participant attitudes, so we wanted to allow space for those participants (Saldaña, 2021).

We allowed for simultaneous coding, where more than one code can apply to and overlap. We afforded for multiple codes for each response because of the richness of the data. This allowed us to capture the complex and underlying meanings found in our rich data. For example, if a participant described their participation in a professional development, this would give us information about the topics of the PD, reveal an attitude they have towards a PD, and give us information about their context in relationship to that PD. Because of our use of CAQDAS, the codes were easily organized (Saldaña, 2021).

Team coding allowed for a group interpretation and understanding of the data, allowing for a reality-check. Multiple perspectives gave a richer understanding. We established consistency through multiple coders, reaching an intercoder agreement (DeCuir-Gunby et al., 2011; Saldaña, 2021). Because of the subjectivity of qualitative coding, we chose to reach an agreement through intensive group discussions to obtain a group consensus, with the goal of the group agreeing (DeCuir-Gunby et al., 2011; Harry et al., 2005; Saldaña, 2021). Through group coding, we explored examples and non-examples. We negotiated for consensus through conversation, discussing and redefining codes as needed (DeCuir-Gunby, et al., 2011).

To ensure reliability, we completed a subsample together (Neuendorf, 2017). Drawing from content analysis in social science, which suggests coding 10% to 20% of the total sample as a group. We decided to code the first 15% of the survey questions together, negotiating for consensus and creating an open code book (DeCuir-Gunby et al., 2011; Harry et al., 2005; Neuendorf, 2017). The initial codebook had 67 codes and 8 categories.

We then split the rest of the survey dataset equally among 3 researchers, and we coded individually, using the coding framework and adding codes as the data necessitated allowing for multiple codes. After the initial round of open coding was completed, the group met to check for redundancy, consistency, and to negotiate any ambiguity amongst codes. Drawing on Harry et al.'s (2005) and DeCuir-Gunby et al.'s (2011) work, we tested the codes for clarification and reliability through group consensus and dialogue. Then we completed the second round of coding where we checked for consistency and clarity to establish credibility and trustworthiness of codes (Lincoln & Guba, 1985). During the coding process, we completed 5 cycles of individual coding, meeting to continue to negotiate codes. The multiple coders allowed for multiple perspective, which allowed us to establish credibility and reliability through

crystallization of the data. Crystallizing data allows for a complexity to data interpretations, multiple points of view, and reflexive considerations (Ellingson, 2009).

After the survey question was coded, we had 194 codes across 8 categories. We condensed the 8 categories into 6. We repeated a similar process to code the interviews. We started with the categories and existing codes from the survey questions, as the survey had similar data. As a group, we coded 3 interviews, which was about 30% of the interviews, again negotiating for 100% consensus. We allowed for additional codes as they emerged. We then completed coding individually, regularly meeting to review our interview codes together. We completed three rounds of coding on the interviews in this manner. Our PI joined us for the beginning consensus coding sessions on both the survey and the interview, and we worked without the PI for the follow-up rounds of coding.

The second phase is axial coding, allowing researchers to identify connections between codes (DeCuir-Gunby et al., 2011; Williams & Moser, 2019). Moving from open to axial coding and selecting themes is a non-linear loop, allowing the researcher to engage with and revisit the data as they refine their coding and theming (Williams & Moser, 2019)

After both the interviews, and the PI, the other coders, and I met to collapse the coding tree during a round of axial coding. We engaged in axial coding, again, negotiating for consensus, as a group, to determine how codes were split and which codes were related, working to reassemble them into categories (Saldaña, 2021). We nestled child codes into parent codes (Williams & Moser, 2019). We also used pattern coding, to condense our large number of codes, look for explanations, and look for patterns of behavior (Saldaña, 2021).

We started with 196 codes for the survey. We removed one-offs. For example, many PDs offered were very specific to districts, such as a specific person or program no one else mentioned, so those were removed. We collapsed everything but the attitudes.

One challenge we faced was that the amount of attitudes and variety in the attitudes that came up. We met again just to negotiate attitudes. Because attitudes are so hard to pin down, we made physical cards with the codes written on them. We then divided the cards into larger categories. As a group we grabbed a handful of cards and put them into piles. We sorted the attitudes into 5 major categories, attitudes about literacy, attitudes about the school district, attitude about PD, and attitudes about kids. After the first sort, we read the codes out loud, and we pulled out codes that did not seem to fit to negotiate. We only placed the code when we had 100% agreement. While working on the sorting process, we realized attitudes about the district also encompassed attitudes about the educational system as a whole. As teachers saw themselves situated within the nebulous educational system, the school district was an easier stand-in to describe their positionality, their agency, and their accesses. Attitudes about PD were straight forward. They were either positive or negative, so we categorized them as helpful or unhelpful. As we sorted, we found a new theme arrived, which we called “What is my job?” as people grappled with what their job really was. We also looked closer into the category with attitudes about kids. We realized these fit better in another category. The code “little kid stuff” was a complaint about PD not being for secondary people. Other attitude about kids were actually concerns about the literacy crisis, so we moved it into literacy category, and then other attitudes were really rooted in feelings about what the job is, so we moved attitude about kids into the job category. The literacy attitudes fell into Science of Reading, literacy is a big issue, we don’t have solutions, and then a few counter-points that literacy is not important and it’s supplemental. After

we had collapsed the codes physically, we went back to MAXQDA to update the codes. We ended with 6 categories, and 163 codes in the survey, and 6 categories and 104 codes in the interview. Please see the appendix for the full codebook.

After completing the coding process, I moved from the axial coding phase to selective coding where themes emerged (Williams & Moser, 2019). I used thematic analysis to create the themes. I drew on Braun and Clarke’s (2022) six-step process. I first matched each category with a research question, and then I considered how those categories worked together to answer the question, and themes emerged. I present these findings in chapter 4. Please see Table 3.2 for an example of the journey from raw data to final theme. The complete codebook is in the Appendix.

Table 3.2 Code Examples

Source	Raw Data	Code	Category	Theme
Survey Data	“I have received roughly 15 hours of training in dyslexia and structured literacy. The trainings were provided by KSDE and/or district staff.”	KSDE	Provider	Context Influences Access
Interview Data	“The only thing this district currently offers is LETRS, which is a wonderful PD, but not entirely relevant to the level of English that I teach unless I am specifically helping students at lower reading levels.”	Literacy is not my job	Attitude about my job	Literacy is not my job; Literature is my job

Trustworthiness and Validity

Validity of the Quantitative phase

The quantitative, Likert scale, component of the survey was adapted from the TSELI (Tschannen-Moran & Johnson, 2011). Because quantifying teachers’ feelings of efficacy

regarding literacy is an abstract concept, it was necessary to have construct validity in the study. “Construct validity refers to the extent to which a higher-concept construct...is accurately represented in the particular study.” (Johnson & Christensen, 2012, p. 261). Brown (2006) explains that confirmatory factory analysis is a tool for construct validation. I ran a confirmatory factor analysis using SPSS.

The Confirmatory Factor Analysis resulted in two factors consistent with the broader literacy questions and the five pillars of literacy. While running this analysis, one question resulted in equal loading between the two categories of questions. The loading on “I can help students monitor reading strategies” is equal on the two components. This cross-loading indicates the question is not distinctive between the two components. Traditionally this item would be removed from the instrument. However, I decided to keep it because reading strategies is a component of the five pillars of literacy, reading comprehension, and it is also discussed and trained on within broader literacy contexts. Therefore, it was important to capture teacher responses, even though it fit within both categories. Additionally, this question is almost identical to the original survey, which asks “To what extent can you help your students monitor their own use of reading strategies?” (Tschannen-Moran & Johnson, 2011, p. 756). Please see the Appendix for more details.

Additionally, I ensured the quantitative data is reliable. I used Cronbach’s alpha to check for reliability, as it tests the degree that items are interrelated. I ran this test in SPSS. I separated the questions into the overall broader literacy category, and the five pillars category. Both tests came back with the coefficients higher than .07, which is the threshold for reliability (Johnson & Christensen, 2012). Please see the Appendix for more details.

Trustworthiness of the Qualitative phase

Trustworthiness can be ensured through a variety of measures. The use of the qualitative and quantitative phases will serve as a triangulation (Bloomberg, 2023). My bias and positionality was checked through reflexive practices such as a research journal (Bloomberg, 2023). Additionally, working as part of a team gave me a chance to check my positionality. Because I worked with a team, multiple perspectives allowed for a richer understanding. We established consistency to reach an intercoder agreement (DeCuir-Gunby et al., 2011; Saldaña, 2021). We ensured reliability in coding by coding a sub sample together, working to reach a group consensus (DeCuir-Gunby et al., 2011; Harry et al., 2005; Neuendorf, 2017; Saldaña, 2021). We redefined codes, as we checked for consistency and clarity (DeCuir-Gunby et al., 2011; Lincoln & Guba, 1985). This team approach allowed for multiple perspectives, giving a crystallization of the data (Ellingson, 2009).

Summary

This mixed-methods study explored the experiences of secondary English teachers with regards to their experiences with literacy-focused professional development and their feelings of literacy efficacy. The data set was comprised of survey questions with both qualitative and quantitative measures, including eleven closed-ended Likert scale survey questions focusing on teachers' self-efficacy (160 responses) and one open-ended survey question asking teachers about their experiences with literacy-focused professional development (158 responses). The data set also included unitized data from one follow up interview (11 participants). The foundational framework for analysis is thematic analysis (Braun & Clark, 2022), my theoretical framework is a literacy focused sociocultural theory (Lewis et al., 2013; Vygotsky, 1978). I also drew on a supplementary structural framework conceptual informed by professional

development work by Guskey (2003, 2014), Desimone (2009), and Darling-Hammond et al. (2017) work, as well as the National Reading Panel's report (Shanahan, 2005). The goal of this study was to explore the broader landscape of professional development in literacy in Kansas in a post-Science of Reading world.

Chapter 4 - Data Presentation

The data for my dissertation was collected as part of a larger grant-funded research study with the goal of improving adolescent literacy outcomes in Kansas. This broader grant-funded research project involved a statewide inquiry about the current adolescent literacy curriculum and teaching practices in middle and high school English Language Arts classrooms. The data for this inquiry is derived from two key sources: a broader survey and two rounds of follow up interviews. There were 99 questions asking about a variety of topics regarding literacy education, with both open and closed-ended questions. The follow-up interviews included two rounds of interviews, approximately one-hour in length. The first follow up interview asked questions regarding the experiences of selecting literature and literacy instruction in the teachers' specific teaching context. The second follow up interview asked about teachers' experiences with literacy-focused professional development, as well as questions about their experiences with instructing ELL students.

The participants were central to the grant-funded research project. There were 185 useable survey responses. Fourteen teachers participated in the first round of interviews, and eleven continued to the second round. Participants came from throughout the state, with teacher representation from every area: 23% of participants were urban teachers; 32% were suburban teachers, and 43% of participants were rural teachers. Teachers responded to the survey from 65 out of the 105 counties across the state, and interview participants represented all eight regions of the state.

Efforts were made to maintain participant confidentiality and protect participant data. Survey results were anonymous. The survey did not collect identifying information from

participants. Participants were given instructions to reach out separately for payment or to volunteer to participate in follow-up interviews. Survey results and interview data were stored behind password protection. Interview data was anonymized for analysis, and a key connecting participants to their interview was stored separately. References to specific places in Kansas were removed from this dissertation to protect participant identity.

Drawing on a subset of data from this larger grant-funded project, my specific dissertation research examines teachers' self-reported efficacy levels in regard to literacy-related pedagogy, as well as, teachers' experiences with literacy-centered professional development, their resources, assets, needs, barriers, and their feelings of agency and autonomy in regards to these experiences. I specifically wanted to know more about how these experiences and realities varied based on teaching contexts: rural, urban, and suburban.

My dissertation data includes eleven closed-ended questions from the survey, one qualitative question from the survey, and unitized data from one of the follow-up interviews. The close-ended questions ask teachers to evaluate their own self-efficacy regarding literacy topics. Of the 185 respondents, 160 responded to these Likert Questions. Please see Table 4.1 for participant teaching context information. The open-ended survey question asked teachers to describe their own experiences with literacy-focused professional development, as well as their resources and their needs. Of the 185 respondents, 158 responded to this open-ended question. Finally, I completed qualitative analysis on the second follow up interview, where I unitized the data to focus on the professional development experiences with science of reading, other literacy training, access to resources, and barriers. Of the 14 original interview participants, 11 participants continued to the second follow up interview. The qualitative coding for this

dissertation research was completed with the help of the PI and two GTAs from the larger grant-funded research project.

Quantitative Data

Data Sample Demographics

As seen in the tables below (Tables 4.1 through Table 4.5), our participants represented a variety of teacher identities. Table 4.1 shows participants' teaching contexts. Rural teachers made up 47% of my survey responses and 45% of my interview participants. Suburban teachers made up 31% of my survey responses and 18% of my interview participants. Urban teachers represented 22% of my survey responses and 36% of my interview participants. As seen in Table 4.2, both survey and interview participants represented a range of teaching experiences, from first-year teachers to teachers with over 25 years of experience. In fact, one interview participant was entering her 30th year of teaching. Teachers in the survey responses represented a variety of genders and race and ethnicities, while participants who went on to the interviews were primarily white women, and a few white men. Table 4.3 shows that overall, participating teachers were well-educated, with 90% of survey responses indicating they had earned graduate credit or a master's degree. The ethnicity and gender make up is presented in Table 4.4 and Table 4.5.

Table 4.1. Participant teaching context by data sample

	Total (N)	Rural (#, %)	Suburban (#, %)	Urban (#, %)
Likert Questions	160	75; 47%	50; 31%	35; 22%
Open Ended Survey Questions	158	75; 47%	49; 31%	34; 22%
Interview Data	11	5; 45%	2; 18%	4; 36%

Table 4.2. Participant years of experience by data sample

Total (N)	0-2 Years (#, %)	3-5 Years (#, %)	6-8 Years (#, %)	9-10 Years (#, %)	11-15 Years (#, %)	16-20 years (#, %)	Over 25 Years (#, %)
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Likert Questions	160	11; 7%	23; 14%	21; 13%	8; 5%	26; 16%	22; 14%	32; 20%
Open Ended Survey Questions	158	11; 7%	23; 15%	21; 13%	8; 5%	26; 16%	22; 14%	30; 19%
Interview Data	11	X	X	1; 9%	X	4; 36%	3; 27%	3; 27%

Table 4.3. Existence of PD by participant by data sample

	Total (N)	Yes (#; %)	No (#; %)
Likert Questions	160	144; 90%	16; 10%
Open Ended Survey Questions	158	142; 90%	16; 10%
Interview Data	11	9; 82%	2; 18%

Table 4.4. Participant reported ethnicity by data sample

	Total (N)	Asian (#;%)	Black or African American (#;%)	Hispanic/ Latino (#;%)	White (#;%)	More than one race (#;%)	Prefer not to say (#;%)
Likert Questions	160	n=1; 1%	n=2; 1%	n=1; 1%	n=149; 93%	n=6; 4%	n=1;1%
Open Ended Survey Questions	158	n=1; 1%	n= 2; 1%	n=1;1%	n=147; 93%	n=6; 4%	n=1;1%
Interview Data	11	X	X	X	n=11; 100%	X	X

Table 4.5. Participant reported gender by data sample

	Total N (N)	Female (#;%)	Male (#;%)	Non- Binary (#;%)	Did not Respond (#;%)
Likert Questions	160	139; 86%	14; 9%	2; 1%	5; 3%
Open Ended Survey Questions	158	138; 87%	13; 8%	2;1%	5; 3%
Interview Data	11	8; 73%	3; 27%	X	X

Quantitative Result by Research Question

This chapter presents data in two parts: quantitative data and qualitative data. The quantitative data begins with the Likert responses from the 11 quantitative self-efficacy questions

to establish a baseline of self-reported capability. I then present selected Chi Square results, which show statistical analysis of the qualitative code frequencies that were coded in the open-ended survey questions and interviews. The qualitative findings are presented aligned to each research questions, showing the themes that have emerged and how the codes support those themes. Additionally, I discuss the quantitative analysis of the qualitative code frequencies.

Before discussing the research questions, I first present the quantitative teacher-efficacy data. This presentation of Likert-scale perceived self-efficacy provides important context for the results to the open-ended and interview questions. Establishing a baseline for competency and topics, presented across teaching contexts, provides an important reference point when considering teachers' experiences with professional development, resources, assets, needs, barriers, and agency and autonomy. First understanding their feelings of confidence and competence regarding these literacy topics allows us to better unpack the other findings presented in chapters four and five.

RQ1: How do secondary Language Arts teachers experience literacy professional development in rural, suburban and urban contexts?

Quantitative data analysis answered the question “How do secondary Language Arts teachers experience literacy professional development in rural, suburban, and urban contexts?” To analyze these results, I used the following null hypothesis.

H₀1: There is no relationship between the dependent variable self-efficacy levels regarding general literacy topics and the independent variable of teaching context: rural, urban, or suburban.

H₀2: There is no relationship between the dependent variable self-efficacy levels regarding the five pillars of literacy topics and the independent variable of teaching context: rural, urban, or suburban.

H₀3: There is no relationship between the dependent variable of code frequencies regarding literacy professional development topics and the independent variable of teaching context: rural, urban, or suburban.

Self-Efficacy Responses

The first unit of analysis was data collected using a Likert scale. We asked teachers how confident they felt providing literacy instruction and support in a variety of literacy topics.

The questions fell into two categories: the broader literacy category and the five pillars of literacy. The broader literacy category asked about their ability to provide reading tasks, writing opportunities, reading and writing strategies, and interventions. The five pillars of literacy category drilled down more specifically to ask about their efficacy with phonemic awareness, phonics, vocabulary, fluency, and reading comprehension. The goal of these questions was to get a sense of both teachers' baseline confidence levels, as well as to explore if teachers in different teaching contexts have different levels of confidence.

The first table, Table 4.6, presents data regarding broader categories, such as reading and writing. As seen in Table 4.6, the vast majority of teachers (over 90%) felt extremely confident or expert level confident with these broader categories of activities, such as giving opportunities to apply knowledge to reading tasks (97%; mean= 4.34), respond to reading (95%; mean= 4.54) and modeling writing strategies (91%; mean= 4.43). However, slightly fewer teachers felt confident or expert level confident with providing more personalized support such as providing reading strategies to students of different levels (72%; mean =3.88), helping students monitor

their use of reading strategies (60%; mean = 3.75) or adjusting the reading material to individual students (60%; mean= 3.82).

Table 4.6. Participant self-reported Likert self-efficacy scores for broader literacy categories

Statement:	Not Confident (1)	Very Little Confidence (2)	Somewhat Confident (3)	Confident (4)	Expert Level (5)	Mean
<i>I can provide my students with opportunities to apply their prior knowledge to reading tasks.</i>	1%	0%	2%	58%	39%	4.34
<i>I can help my students monitor their own use of reading strategies.</i>	6%	6%	33%	38%	22%	3.75
<i>I can adjust reading materials to the proper level for individual students</i>	1%	5%	33%	31%	29%	3.82
<i>I can effectively teach various reading strategies to students of different levels</i>	2%	9%	16%	42%	30%	3.88
<i>I can model effective writing strategies.</i>	1%	2%	7%	37%	54%	4.43
<i>I provide students writing opportunities in response to reading</i>	2%	3%	4%	34%	61%	4.54

As seen in Table 4.7, the fewest number of teachers felt confident or expert level confident supporting students through more specific Science of Reading tasks such as phonemic awareness (52%; mean =3.48), phonics (49%; mean=3.41), and fluency (54%; mean = 3.5). Teachers did report feeling confident or expert level confident at much higher rates with reading comprehension (45%; mean=4.31) and vocabulary (74%; mean=4.01).

Table 4.7. Participant self-reported Likert scores for the five pillars of literacy

Statement:	Not Confident (1)	Very Little Confidence (2)	Somewhat Confident (3)	Confident (4)	Expert Level (5)	Mean
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<i>I have an understanding of how language can be broken into individual sounds and the ability to teach students how to identify, manipulate, and blend these sounds.</i>	6%	20%	22%	27%	25%	3.48
<i>I have a deep understanding of letter-sound correspondences and can effectively teach students how to decode words by sounding them out.</i>	7%	20%	23%	22%	27%	3.41
<i>I can assess and address different aspects of reading fluency, including accuracy, rate, and expression to ensure students are reading with appropriate pace and understanding.</i>	7%	15%	23%	27%	27%	3.5
<i>I can select and explicitly teach specific vocabulary words within a given lesson or unit, considering factors such as students' prior knowledge, text complexity, and the importance of word to understanding content.</i>	2%	6%	47%	44%	1%	4.31
<i>I understand the process of reading comprehension, including the various strategies can use to extract meaning from the text.</i>	1%	5%	21%	40%	34%	4.01

To examine differences between the average reported efficacy amongst teachers in different local settings, I ran an ANOVA test on the Likert results to compare results between rural, urban, and suburban teachers. Creswell (2014) explains, “For experimental designs with categorical information (groups) on the independent variable and continuous information on the dependent variable, researchers use t tests or univariate analysis of variance (ANOVA)” (p. 178).

In this case, the categorical groups were rural, urban, and suburban teachers. The continuous information, or the dependent variable was their levels of self-reported self-efficacy. Essentially, I wanted to know if there was any connection between the contexts teachers were teaching in and their feelings about their own ability to teach literacy.

The results presented in Table 4.8 and Table 4.9 indicate there is no significant difference in the average efficacy and confidence levels between groups when it comes to broader literacy topics (see Table 4.9). This indicates that varying levels of access to PD and quality of PD does not impact teachers' perceived feelings of self-efficacy and confidence in broader topics. Thus we accepted the null hypothesis that there is no relationship between the dependent variable self-efficacy levels regarding general literacy topics and the independent variable of teaching context: rural, urban, or suburban.

Table 4.8. Participant self-reported Likert mean scores for self-efficacy for broader literacy categories by teaching context

Statement	Rural Mean Rural n=75	Urban Mean Urban n=35	Suburban Mean Suburban n= 50	Overall Mean	ANOVA F	P Value
<i>I can provide my students with opportunities to apply their prior knowledge to reading tasks.</i>	4.43	4.34	4.2	4.34	2.327	0.1010
<i>I can help my students monitor their own use of reading strategies.</i>	3.83	3.66	3.72	3.75	0.494	0.6110
<i>I can adjust reading materials to the proper level for individual students</i>	3.8	4.06	3.68	3.82	1.632	0.1989
<i>I can effectively teach various reading strategies to students of different levels</i>	3.89	4.00	3.78	3.88	0.472	0.6228
<i>I can model effective writing strategies.</i>	4.37	4.51	4.44	4.43	0.416	0.6607
<i>I provide students writing opportunities in response to reading</i>	4.5	4.60	4.56	4.54	0.803	0.4496

When considering self-efficacy around the five pillars of literacy (see Table 4.9), I found that the questions regarding phonemic awareness, phonics, and fluency indicated a statistically significant difference. When asked about phonemic awareness, suburban teachers (mean= 3.10) reported lower levels of self-efficacy than and rural teachers (mean= 3.65) at a statistically significant rate with a p-value of 0.0252. Reporting their self-efficacy with phonics, suburban teachers (mean= 3.00) were statistically significantly less efficacious than urban teachers (mean= 3.74) with a p-value of 0.0168. When considering fluency, I found that suburban teachers (mean=3.18) reported a statistically significant lower rate of self-efficacy than urban teachers (mean= 3.86) with a p-value of 0.0443. Thus we rejected the null hypothesis that there is no relationship between the dependent variable self-efficacy levels regarding the five pillars of literacy topics and the independent variable of teaching context: rural, urban, or suburban. Considering the present-day shift to building teacher capacity with regards to specific literacy skills, such as those in the five pillars, it is important to consider this variation between teaching contexts.

Table 4.9. Participant self-reported Likert mean scores for self-efficacy in the five pillars of literacy by teaching context.

Statement	Rural Mean Rural n=75	Urban Mean Urban n=35	Suburban Mean Suburban n=50	Overall Mean	ANOVA F	P Value
<i>I have an understanding of how language can be broken into individual sounds and the ability to teach students how to identify, manipulate, and blend these sounds.</i>	3.65	3.66	3.10	3.48	3.768	0.0252***
<i>I have a deep understanding of letter-sound correspondences and can effectively teach students</i>	3.52	3.74	3.00	3.41	4.197	0.0168***

<i>how to decode words by sounding them out.</i>						
<i>I can assess and address different aspects of reading fluency, including accuracy, rate, and expression to ensure students are reading with appropriate pace and understanding.</i>	3.52	3.86	3.18	3.5	3.180	0.0443***
<i>I can select and explicitly teach specific vocabulary words within a given lesson or unit, considering factors such as students' prior knowledge, text complexity, and the importance of word to understanding content.</i>	4.33	4.49	4.14	4.31	2.307	0.1030
<i>I understand the process of reading comprehension, including the various strategies can use to extract meaning from the text.</i>	4.07	4.06	3.88	4.01	0.711	0.4925

This quantitative, close-ended self-efficacy data provides a baseline of understanding for how teachers perceive their own ability levels. As we move forward into their specific experiences and attitudes around professional development, as well as the differences in those experiences and attitudes across contexts, it is interesting to note that the general confidence levels did not vary across context for broader literacy questions but did vary within the five pillars.

Differences in Code Frequencies from Survey Contexts

In the survey responses, there were 158 responses from secondary Language Arts teachers to the open-ended question “Have you received literacy specific training or professional development? If so, who provided this training and how often did this training occur? If not, would this be beneficial to you?” Within these responses, there were 75 rural participants, 49

suburban participants, and 34 urban participants. Please see Tables 4.1 through 4.5 for a more detailed description of our participants.

After completing two rounds of coding with the research team, I completed contingency tables, or cross-tabulations, to compare two or more categorical variables. The categorical variables were the teaching contexts: rural, urban, and suburban, compared with the codes to see how often the various codes appeared across contexts (Johnson & Christensen, 2012). The independent variable was the teaching context, and the dependent variable were the codes.

I then ran a Chi-Square analysis on every category, code, and subcodes from the contingency tables to see if there were statistically significant differences in the number of times the codes appeared amongst the different teacher locals. I completed the contingency tables and the Chi-Square analysis in MAXQDA (Johnson & Christensen, 2012). Six codes came back as statistically significant (see table below). I did not run statistical analysis on the codes from the interviews because of the low sample size, which became especially low, as I was comparing across three groups.

Selected Chi Square Results

Please see table 4.10 below for selected results to the Chi Square results. Below are results that were statistically significant, results that were not statistically significant that I was surprised to find did not differ by context, and results that were not statistically significant in differences between contexts, suggesting a universal experience across contexts. Because some of the code frequencies came back statistically significant, I rejected the null hypothesis that there is no relationship between the dependent variable of code frequencies regarding literacy professional development topics and the independent variable of teaching context: rural, urban, or suburban.

Table 4.10. Selected Chi Square Results: Statistically Significant

Codes	Rural n=75 (#;%)	Suburban n=49 (#;%)	Urban n=34 (#;%)	Chi Square Statistic	P Value
Weekly	0;0%	0;0%	2;6%	7.388	0.0249***
In District	16;21%	25;51%	14;41%	12.284	0.0022***
PLC	0;0%	0;0%	3;9%	11.153	0.0038***
Service Center	10;13%	1;2%	0;0%	9.077	0.0107***
State Supported	37;49%	15;31%	7;21%	9.6363	0.0080***
Literacy Measures					
Overall Literacy	25;33%	28;57%	7;21%	12.693	0.0249***
Overall No LETRS	9;12%	11;22%	0;0%	9.2054	0.0100***
Helpful	17;23%	14;29%	1;3%	8.679	0.0130***
Wants PD	21;28%	14;29%	2;6%	7.939	0.0189***

I found that the frequency of the training was statistically significant. The Weekly code was used to describe the frequency at which teachers indicated they had received training. Urban teachers (urban n=2; 6%) reported receiving training weekly, whereas rural (rural n=0; 0%) and suburban (suburban n=0; 0%) teachers did not report receiving weekly raining. These results had a p-value of 0.0249.

When considering where teachers receive training from, a few codes came back statistically significant; these codes where the In-District code, the PLC code, and the Service Provider code. The In-District code was used for teachers who indicated they received their training in district. As seen in Table 4.10, suburban teachers (suburban n=25; 51%) reported receiving their training in-district at statistically significant higher rates than urban (urban n=14; 41%) and rural teachers (rural n=16; 21%) with a p-value of 0.0022. The PLC code was used for teachers who described receiving their training in-district and within a Professional Learning Community (PLC) setting. Urban teachers (urban n=3; 9%) reported receiving their training in-district in a PLC at a statistically significant higher rate than suburban (suburban n=0; 0%) and rural teachers (rural n=0; 0%), who did not report that with a p-value of 0.0038. The Service Provider code was used for teachers who indicated they received their training from a

professional development service provider, such as Greenbush or Smoky Hill. Rural teachers (rural n=10; 13%) reported receiving training from a service provider at significantly higher frequencies than urban (urban n=0; 0%) and suburban (suburban n=1; 2%) teachers with a p-value of 0.0107. As seen in table 4.10, suburban teachers only discussed service providers once, and urban teachers did not mention service providers at all.

Another provider code was the State Supported Literacy Measures Code. This code encompassed programs that were either provided directly by the state, or trainings that were mandated by the state or otherwise supported by the state. I found that rural teachers (n=37; 49%) were statistically significantly more likely to access training if training was state supported than suburban (suburban n=15; 30%) and urban (urban n=7; 21%) teachers, with a p-value of 0.0080.

When considering the topics of training, the code Overall Literacy encompassed all of the literacy training teachers mentioned, comprised of the five pillars of literacy, as well as other literacy training, writing, training for ELL students, and text complexity. I found that suburban (suburban n=28; 58%) and urban (urban n=17; 50%) teachers received literacy-centered PD at a statistically higher rate than rural teachers (rural n=25; 33%). This code was statistically significant with a p-value of 0.0249.

The code No-LETRS came back as statistically significant. This code was used to capture teachers who brought up LETRS training, which was widely available across the state, with the specific intention of mentioning that they had not taken the training. Rural (rural n=9; 12%) and suburban (suburban n=11; 22%) were statistically significantly more likely to bring up that they had not had LETRS training than urban teachers, (urban n=0; 0%) who did not mention this at all. This was statistically significant with a p-value of 0.0100.

When considering teacher attitudes towards PDs, two codes came back as statistically significant; these were the Helpful code and the Wants PD code. The Helpful code was used to describe the attitude that the PD the teachers had received was helpful. Rural (rural n=17; 23%) and suburban (suburban n=14; 29%) teachers indicated PD was helpful at a statistically significantly higher rate than urban teachers (urban n=1; 3%), with a p-value of 0.0130. Only one urban teacher mentioned PD was helpful. The Wants PD was used to capture teachers expressing they wanted more PD than they currently were receiving. Rural (rural n=21; 28%) and suburban (suburban n=15; 30%) teachers reported wanting PD at a statistically significant higher frequency than urban (urban n=2; 6%) teachers, with only two urban teachers indicating they wanted more PD, with a p-value of 0.0189.

Table 4.11. Selected Chi Square Results: Not statistically significant, but surprising

Code	Rural n=75 (#;%)	Suburban n=49 (#;%)	Urban n=34 (#;%)	Chi Square Statistic	P-Value
KSDE	18; 24%	7; 14%	4; 12%	3.122	0.2100
Self-Development	7; 9%	2; 4%	2; 6%	1.340	0.5117

As presented in Table 4.11, two codes came back as not statistically significant, KSDE and Self- Development, that was I surprised were not statistically significant. The first code was the KSDE code. The KSDE code was used to describe trainings that were provided by KSDE. While rural teachers (rural n=18; 24%) reported this at higher rates than suburban (suburban n=7; 14%) and urban (urban n=4; 12%) teachers, with a p-value of 0.2100, it was not statistically significant. The second code that was not statistically significant was Self-Development. Self-Development was a code used to describe trainings where teachers had to find their own professional development. While rural teachers (rural n=7; 9%) described this at a higher rate than suburban (suburban n=2; 4%) and urban (urban n=2; 6%) teachers, this was not statistically significant, with a p-value of 0.5117. I expected rural teachers to rely on KSDE and Self-

Development to access PD opportunities, at much higher rates than other contexts, and I was surprised to see that this was happening across contexts.

Some codes came back as not statistically significant, indicating there was no statistically significant difference between context. I highlight these now in table 4.12 to discuss the lack of differences, which may indicate a universal experience.

Table 4.12. Selected Chi Square Results: Not Statistically Significant, indicating a universal experience.

Code	Rural n=75 (#;%)	Suburban n=49 (#;%)	Urban n=34 (#;%)	Chi Square Statistic	P-value
Dyslexia	5; 7%	6; 12%	2; 6%	1.537	0.4637
Existence- Yes	50; 67%	32; 65%	26; 76%	1.1386	0.5105
LETRS	14; 19%	9; 18%	6; 18%	0.016	0.9919
Yes					
Nothing Secondary	7; 9%	8; 16%	1; 3%	4.050	0.1320
District Does Not	5; 7%	2; 4%	2; 6%	0.371	0.8305
Provide enough					
Literacy is not my job	4; 5%	2; 4%	1; 3%	0.337	0.8451

The first code was Existence. Existence-Yes was a code used to capture that the teacher reported having had training. Teachers across contexts (rural n=50; 67%; suburban n= 32; 65% urban n=26; 76%) reported having completed literacy focused training. This was not statistically significant with a p-value of 0.5105. The lack of statistically significant difference supports the argument that PD is widely available to teachers across contexts.

I would like to highlight two codes that are associated with programs that were widely available across the state. The codes were Dyslexia and LETRS. The Dyslexia code was used for teachers who described taking dyslexia training. There was no statistical difference in Dyslexia (rural n=5; 7%; suburban n=6; 12%; and urban n=2; 6%), with a p-value of 0.4637. The LETRS-Yes code was used to capture teachers who mentioned taking the LETRS training. This code appeared across contexts (rural n=14; 19%; suburban n=9; 18%; urban n=6; 18%); with a p-value of 0.9919, which was not statistically significant. These programs were made widely

available across the state, so a lack of a statistically difference between contexts, show that these widely available programs were utilized across contexts.

Several attitudes also appeared across contexts, without a statistically significant difference. These attitude codes were “Nothing Secondary,” “District Does Not Provide Enough,” and “Literacy is Not My Job.” The code “Nothing Secondary” was used to capture the idea that there was nothing secondary available, and the training instead focused on the primary levels. This attitude was more prevalent in rural (rural n=7; 9%) and suburban (suburban n=8; 16%) teachers, and it was less prevalent in urban teachers (urban n=1; 3%). With a p-value of 0.1320, this difference was not statistically significant, which suggests the attitude is held across contexts. The code “District Does Not Provide Enough” was used to capture the idea that the professional development provided by the district was not adequate. Teachers across contexts expressed this attitude (rural n=5; 7%; suburban n=2; 4% urban n=2; 6%). The differences were not statistically significant, with a p-value of 0.8305. The code “Literacy is not my job” was used to capture an attitude teachers expressed that literacy is not their job, and instead it is someone else’s job. Teachers across contexts expressed this attitude (rural n=4; 5%; suburban n=2; 4%; urban n=1; 3%). The p-value was 0.8451, which was not statistically significant. This suggests context does not impact whether not teachers feel that literacy is their job.

Qualitative Data

I presented the qualitative coding from both the interviews and the open-ended questions, as the qualitative responses came from both survey data and the follow-up interviews. Because I completed a quantitative statistical analysis with the qualitative codes, I consider the quantitative findings alongside the qualitative data when it is relevant. The qualitative data is organized by

research question, and I will also revisit the quantitative data regarding the code frequencies into the data conversation as needed. Please see the Appendix for the complete codebook.

From the larger data set, I chose one qualitative question from the survey, asking participants, “Have you received literacy specific training or professional development? If so, who provided this training and how often did this training occur? If not, would this be beneficial to you?” While there were 185 usable survey responses, there were only 158 survey responses to this question. Of these survey responses, there were responses from 75 rural teachers; 49 suburban teachers; and 34 urban teachers. This compares with the school districts in Kansas, where the majority are rural, and the fewest are urban. Along with the survey data, the coding team also coded a unitized set of data from the second follow up interview, which focused on the science of reading and experiences with literacy professional development. Of the eleven participants, five were rural, two were suburban, and four were urban. Please see tables 4.1 through 4.5 for a breakdown of participant data.

When open-coding the open-ended the survey data, the codes fell into six categories, guided by my research questions. The categories were: existence, frequency, provider, topic, type of training, and attitude. The connection between the categories and the research questions is shown in Table 4.13. As we moved on to the interview coding, we used the a priori coding, using these categories to guide our coding of the interviews, looking to see if the interview data would support or challenge the ideas found in the survey coding. We remained open during the interview coding for emerging codes, but no new categories were needed. Table 4.13 explores how the categories and themes answer our research questions.

Table 4.13. Categories and themes presented by research question

Research Question	Categories	Themes
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<i>How do secondary Language Arts teachers experience literacy professional development in rural, suburban, and urban contexts?</i>	Existence Frequency Topic	PD is universal
<i>How do secondary Language Arts teachers describe their resources, assets, and/or needs related to literacy professional development within rural, urban, and suburban contexts?</i>	Type of Training Provider	Policies influence Resources. Context influences access
<i>How do secondary Language Arts teachers describe their barriers to literacy professional development within rural, urban, and suburban contexts?</i>	Attitude	Nothing Secondary Literacy is not my job; Literature is my job
<i>How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?</i>	Attitude	Bang for your buck PD is helpful for some contexts and unhelpful for others Pendulum of Education
		Mercy of Admin

After grouping the categories by how they answered each research question, I constructed themes (Bloomberg, 2023). The themes are reported in four sections, grouped as responses to the research questions. Research question one asks, “How do secondary Language Arts teachers experience literacy professional development in rural, suburban, and urban contexts?” which I answer through exploring the theme “PD is universal.” This theme suggests that despite differences in existence, frequency, and topics among rural, urban, and suburban contexts, the overall experience of PD is universal.

Next, I explore the answer to research question two, “How do secondary Language Arts teachers describe their resources, assets, and/or needs related to literacy professional development within rural, urban, and suburban contexts?” The theme “Policies influence resources” suggests that policies influence how teachers are able to access the resources that are

made available to them. The theme “Context influences access” explores how teachers in different context have different levels of access to different professional developments and resources.

I present the findings to research question three, “How do secondary Language Arts teachers describe their barriers to literacy professional development within rural, urban, and suburban contexts?” Through the themes “Nothing secondary,” “Literacy is not my job; literature is my job,” and “Bang for your buck.” The theme “Nothing secondary” explores a teacher attitude that a barrier to literacy professional development is that it is created for and aimed at primary teachers, leaving nothing for secondary teachers. “Literacy is not my job; literature is my job” is a theme revealing that one barrier may be a staunchly held identity attitude that it is not a secondary English teacher’s job to teach and support literacy instruction or teach people to read. Instead, it is a secondary English teacher’s job to discuss literature, books, classic titles, etc. The final theme suggests one barrier may getting a “bang for your buck.” The “Bang for your buck” theme explores an idea that professional development must be an economical choice to be selected.

The fourth, and final, research question asks, “How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?” I answer with the themes “PD is helpful for some contexts and unhelpful for others,” the “Pendulum of Education,” and “We’re at the mercy of admins.” The theme “PD is helpful for some contexts and unhelpful for others” explores how teachers in different teaching contexts have different relationships with and experiences of professional development opportunities, which then impacts their agency and autonomy. The “Pendulum of Education” theme explores teachers’ perceptions of the pendulum of education

swinging back and forth, influencing the types of professional development they have access to, as well as influencing the demands that are placed on them. The final theme was called “We are at the mercy of admins,” which explored how teachers view their agency and autonomy as directly impacted by the administration in their schools. For each research question, I describe the theme, as well as frequencies, patterns, and key quotations to provide a thick description.

RQ1: How do secondary Language Arts teachers experience literacy professional development in rural, suburban and urban contexts?

The goal of this research question was to explore how secondary Language Arts teachers described their experiences with professional development in different teaching contexts: rural, suburban, and urban. I coded within the broad categories of existence, frequency, and topic to paint a general picture of how teachers experience professional development. I wanted to capture the existence of PD: do teachers receive literacy specific professional development?; frequency of PD: how often are teachers receiving PD? and topic: what are teachers learning about in professional development? Analysis revealed the theme that receiving professional development is universal across contexts. After analyzing each survey answer for the existence of PD, the described frequency of PD offerings, and the topics covered by PD, I found that while professional development varies, it is universally available across contexts; professional development is a universal experience. Across contexts, most teachers reported receiving professional development, and most teachers reported receiving PD one to two times a year. Teachers in all teaching contexts discussed receiving training on both literacy and non-literacy topics.

Professional Development is Universal

Through analyzing the existence of PD, the frequency of PD offerings, and the topics covered in PDs, I captured the theme that the overarching experience of professional development is universal across the state and does not vary greatly by context.

Existence of PD

In examining whether teachers described or mentioned the existence of a literacy specific training or professional development, we coded “yes” or “no,” indicating that either yes they mentioned or described a literacy specific professional development or training, or no they did not. The findings show that 108 (68% of all teachers) Kansan teachers answered they had had literacy training, and 50 (32% of all teachers) Kansan teachers said they had not, meaning twice as many teachers answered, yes they had literacy training, compared to those who had not. Teachers across teaching contexts indicated they had access to training at similar frequencies (rural n=49, 65%; suburban n=33, 67%; urban n= 26, 76%). One suburban teacher described receiving PD, explaining, “Yes, we receive regular literacy training and professional development from our district; we often collaborate with the department from our sister school to make sure alignment happens.” Across all three contexts teachers reported they had not had training at similar rates (rural n=26, 35%; suburban n= 16, 33%; urban n=8, 24%;). One urban teacher explained, “No, I haven't received anything specific on literacy.” This evidence is consistent with the interview responses.

When asked directly if they had received literacy specific training, eight of the eleven interview participants (72%) answered they had received literacy specific training, while three of the eleven (27%) answered they had not received literacy specific training. In the interviews, teachers across all three contexts reported they had had trainings (rural n= 3; 60%; suburban n=2; 100%; urban n= 3; 75%). Only rural (rural n=2; 40%) and urban (urban n=1; 25%) interview

participants answered that they had not received training, while all suburban participants responded they had had trainings (suburban n=2; 100%). For example, one rural teacher explained, “We've had a lot of conversations about that, but I haven't had any instruction in that.” This contrasts with later findings where teachers go on to describe receiving literacy training, but when asked directly if they have had it, some do not believe or perceive that they have. This also reflects a larger trend of suburban teachers receiving more training.

Table 4.14. Professional development frequencies reported by teaching context

Codes	Rural n=75	Suburban n= 49	Urban n=34	P-Value
Not for a while	2; 3%	0; 0%	2; 6%	0.2435
Not Frequently	1; 1%	0; 0%	0; 0%	0.5730
1-2 Times a Year	5; 7%	4; 8%	7; 21%	0.0713
3-4 Times a Year	1;1%	4;8%	2; 6%	0.1754
5-6 times a year	1;1%	2; 4%	1; 3%	0.6261
Monthly	2; 3%	2; 4%	1; 3%	0.9045
Weekly	0; 0%	0; 0%	2; 6%	0.0249***

Training Frequency

Next, I analyzed the data to describe the frequency at which teachers described receiving PD opportunities, which can be viewed in Table 4.14. I found that the most reported frequency of training amongst all teachers was one to two times a year (all teachers n=16;10%). Rural (rural n=5; 7%), urban (urban n=7; 20%), and suburban (suburban n=4; 8%) teachers all indicated receiving training 1 to 2 times a year as the highest frequency (total n=16; 10%). For example, a typical response was “We receive this during district in-service days a couple of times a year.”

Rural teachers reported receiving PD at lower rates than suburban and urban teachers. Rural teachers answered monthly (rural n=2; 3%) at the next highest frequency. Rural teachers also answered, “not frequently” (rural n=1; 1%) and “not for a while,” (rural n=2; 3%), where

suburban teachers did not. For example, one rural teacher responded “We have not had any literacy-specific training for several years. I would welcome such training if it were offered.”

Urban teachers reported receiving PD more frequently than rural teachers. For example, one urban teacher explained, “Our PL coach gives different literacy trainings during our weekly professional learning days.” They answered 3 to 4 times a year (urban n=2; 6%) as the next highest frequency. They also answered “not for a while” (urban n=2; 6%), but they did not respond “not frequently.” For example, one urban teacher responded that they had had literacy PD “a long time ago but it only happens a couple of times a year.” Urban teachers also responded “weekly” (urban n=2; 6%), when the other two groups did not mention weekly PDs. This was statistically significant with a p-value of 0.0249.

Suburban teachers reported receiving PD more frequently than rural teachers. Suburban teachers mentioned 3-4 times a year (suburban n=4; 8%) at the same high frequency as 1 to 2 times a year (suburban=4; 8%). They answered 5-6 times a year (suburban n=2; 4%) and monthly at lower frequency (suburban n=2; 4%). Suburban teachers did not answer “not for a while” or “not frequently” or “weekly.” Only one suburban teacher described frequency in the interviews. During the interview, a suburban teacher described the frequency of their training as “a substantial amount of time,” going on to say their trainings are “over 10 full days a year.”

Topics

Finally, we coded for the topics of training, finding that teachers in all teaching contexts described both literacy and non-literacy related topics. We analyzed the various topics that teachers described learning about during their professional development. Across contexts teachers reported both literacy-related and not literacy-related topics in both survey and

interview results, even though they were only directly asked to describe literacy topics. Table 4.15 presents literacy-related topics broken down by topic.

In the survey, rural teachers reported their overall literacy topic training at lower rates (rural n=25; 33%) at lower rates than suburban (suburban n=28; 57%) and urban (urban n=17; 50%) teachers. For example, a rural teacher shared on the variety of training topics they had received over the years:

Over my teaching career, I attended many workshops and took college courses. I gravitated toward workshops taught by current or retired teachers and were mostly reading related. The majority of those workshops were taken when I was first teaching, and I was in the lower grades, K-2. Most college courses were content specific for ELA. I have since earned my masters. Yes, all the workshops and college courses were beneficial, some more than others. Even those that I took when I was in K-2 still help me work with struggling readers here in the JH.

Suburban (suburban n=28; 57%) and urban (urban n=17; 50%) teachers brought up literacy training at similarly higher rate than rural teachers. For example, one suburban teacher explained “We have in-house PD on implementing vocabulary and reading strategies about 3-4 times per year. I think literacy specific training would be helpful.” In the interviews, all participants described receiving literacy training (suburban n=2; 100%; urban n= 4; 100%; rural n =5;100%).

Despite being asked directly about literacy training topics, teachers across contexts reported non-literacy topics. Rural (rural n=12; 16%) and urban (urban n=5; 15%) teachers discussed non-literacy training at similarly high rates. Whereas suburban (suburban n=3; 6%) teachers discussed non-literacy training at lower rates. For example, one urban teacher explains,

“We do have professional development in-service days but recently they have been on areas such as AI, Canvas, vocabulary, etc.” In the interviews, teachers across all contexts (urban= 3; 75%; rural n=2; 40%; suburban n=1; 50%) described non-literacy training such as testing, computer software training, behavior PD and SEL topics. This reveals a universal confusion as to what constitutes literacy professional development, a need to share on all professional development topics, or a desire to supplement the literacy topics.

In the interviews, urban (urban n =1; 25%) and suburban (suburban n= 1; 50%) teachers described PD that they perceived as reacting to an issue, wherein the district reacted to a problem or hot button topic. Rural teachers did not report reactive PD at all. For example, a suburban teacher described, “So, if something that comes up like say for example, if Snap benefits went away for an extended period of time, I would imagine we would have some kind of PD about working with students with increased food insecurity, you know, that would be on our radar.” Only urban teachers described receiving remedial instructional support in PD.

Looking at more specific topics revealed a less universal experience. In the surveys, suburban teachers received training on specifically the five pillars of literacy at much higher rates (suburban n=22; 45%) than urban (urban n=11; 32%) and rural (rural n=19; 25%) teachers. One urban teacher described learning about fluency for the first time, “We just had a professional development day, and one of the sessions I enjoyed was on increasing text difficulty and fluency. And so I learned a lot about fluency. I probably didn't understand fluency like I could have and came away, I think, with a lot better, perception of what it means for students to be fluent, because I do read aloud in my class regularly and, that really reveals, whether students are fluent readers or not.” In the interviews, every participant discussed receiving training on the five pillars of literacy (suburban n =2;100%; urban n= 4; 100%; rural n =5;100%).

In the surveys, teachers also received a small amount of literacy training on additional literacy topics, not within the five pillars. Urban teachers received this at the highest rate (urban n=4; 12%); suburban teacher received this at the second highest rate (suburban n=3; 6%); and rural teachers, similar to the five pillars of literacy, also received this at the lowest rate (rural n=2; 3%). Rural teachers were the only group to mention state standards as a topic (rural n=2; 3%). For example, when describing the extent of their literacy PD, one rural teacher wrote, “each year before school starts we go through our standards and align them across grade levels.” In the interviews, all three contexts were equally likely to report they had received additional literacy training (rural n= 2; 40%; suburban n=1; 50%; urban n= 2; 50%).

Table 4.15. Literacy topics by teaching contexts in surveys and interviews

Context	Overall literacy topic	Non literacy topic	Five pillars related topic	Additional literacy topic
Rural	Survey n=25; 65% Interview n= 5; 100%	Survey n=12; 16% Interview n=2; 40%	Survey n=19; 25% Interview n=5; 100%	Survey n=2; 3% Interview n= 2; 40%
Urban	Survey n=17; 50% Interview n=4; 100%	Survey n=5; 15% Interview n= 3; 75%	Survey n=11; 32% Interview n=4; 100%	Survey n=4; 12% Interview n= 2; 50%
Suburban	Survey n=28; 57% Interview n=2 100%	Survey n=3; 6% Interview n=1; 50%	Survey n=22; 45% Interview n=2; 100%	Survey n=3; 6% Interview n=1; 50%

Overall rural teachers are receiving less literacy specific training than urban and suburban teachers. Urban and suburban teachers are receiving similar amounts of training, but urban teachers’ training is spread out over topics and suburban teachers training is focused on the five pillars of literacy.

RQ 2: How do secondary Language Arts teachers describe their resources, assets, and/or needs related to literacy professional development within rural, urban, and suburban contexts?

The goal of this research question was to explore how teachers in different teaching contexts, rural, urban, and suburban, describe their resources, assets, and/or needs related to literacy professional development. The survey question asked for a general response regarding literacy professional development, and in our interview questions, we asked teachers directly to describe their resources, assets, and/or needs. We coded this question through the categories “Types of Training” and “Provider,” which would show us how teachers were accessing professional development, revealing their resources, assets, and needs. Analysis revealed two themes. The first theme was “Policies influence resources.” Both LETRS and Science of Reading (SoR) were available across the state, revealing that policies regarding SoR lead to LETRS training being available as a resource across the state. The second theme was that context influences access to resources. The providers teachers used to access resources revealed that teachers in different teaching contexts had vastly different experiences accessing resources.

Policies Influence Resources

While coding for “Types of Training,” we looked for the type of training teachers described as part of their literacy focused professional development. The two main trainings were LETRS training, which is a proprietary brand, or generic Science of Reading training, which is a broader reference to literacy training emphasizing phonics and decoding. These two trainings are closely connected to Kansas literacy policy, revealing the theme that policy directly affects the resources that teachers access.

Looking at survey results, teachers in all three contexts reported taking LETRS at similar rates (rural n=14; 17%; suburban n= 9; 18%; urban n=6; 18%). One teacher described taking LETRS “I have completed LETRS training within the past year and this was provided by KSDE.” During the interview process, rates of attending LETRS training were similar across contexts (urban n =2; 50%; suburban n=1;50%; rural n=1; 20%). However, in the surveys, rural (rural n=9; 12%) and suburban (rural n=11; 22%) teachers indicated they had not had LETRS training at a higher frequency than urban teachers (urban n=0; 0%), who did not bring up that they had not had LETRS training. Bringing up not having attended LETRS indicated teachers were familiar enough with LETRS to note that they had not had it. One rural teacher explains “I have taken the dyslexia training through my district. This is the training that is provided before LTRS training. I have not gone through LTRS training and it does not seem like my district has plans on having the secondary English teachers go through LTRS training.”

Similar to LETRS training, in the survey responses, all three contexts brought up the science of reading at similar rates (rural n=7; 9%; suburban n= 4; 8%; urban n=2; 6%). During the interviews, teachers were directly asked about their experiences with the Science of Reading. Five had personal experience with the SoR; six reported having no experience with SoR, and two of those six were unsure of what the Science of Reading was. One urban teacher described their experiences with SoR, “I had probably 6 or 7 LETRS trainings to learn, you know, about the science of reading...that's my first big experience with it.” Another rural teacher was eager to share, “I had had early opportunities with Science of Reading. I'm almost done with my LETRS training, so I will have that done in December.” Teachers in all three demographics had SoR training (urban n=2; 50%; suburban n= 2 100%; rural n=2; 40%), but suburban teachers had experience with it at the highest rate. Only rural (rural n=2; 40%) and urban teachers (n=1; 25%)

reported not having had Science of Reading training, and only rural (n=1; 20%) and urban (n=1; 25%) teachers reported being unsure of what SoR is. For example, one rural teacher answered, “Yeah, I, I don't know if I know exactly what that term means.”

In the interviews, when discussing SoR, teachers in all three contexts brought up Scarborough's Rope (suburban n=1; 50%; urban n=1; 25%; rural n=1; 20%). In the interviews, one urban participant described learning about Scarborough's Rope, “I learned very quickly a lot of how words and sentences work and how basically I think it's called Scarborough's Reading Rope. But basically, all of the elements come together for a child to be able to read. That whole year was a real crash course for me.” Rural (rural n=2; 40%) and suburban (suburban n=1; 50%) teachers discussed background knowledge. All three contexts discussed reading comprehension (urban n=1; 25%; suburban n=1; 50%; rural n=2; 40%) and vocabulary (urban n= 3; 75%; suburban n=2; 100%; rural n= 4; 80%) more than any other pillar of literacy. Vocabulary was the number one topic. One urban teacher describes this, “We've had a lot of recent emphasis, in the last couple of years on teaching, vocabulary actively.”

In the surveys, rural (rural n=8; 11%) and urban (urban n=7; 21%) teachers brought up various other trainings, such as training from other educational companies, at much higher rates than suburban teachers (suburban n=3; 6%). In the interviews, one rural teacher (rural n=1; 20%) discussed trial and error as a form of training. For example, they described using trial and error to learn how to teach vocabulary, “But, I've learned over the years, really some of it trial, trial and error, is front loading students with vocabulary, especially, essential vocab, you know, key vocab that they're going to be seeing.” This suggests suburban teachers are receiving training on grade level, and urban and rural teachers are accessing remedial training.

Context Influences Access

While coding for who provides training to teachers across the state, I wanted to know where people reported or described receiving training. The main providers were KSDE, universities, school districts, service providers (such as Greenbush or Smoky Hill), educational companies, and self-development, meaning they themselves researched or read on their own. We found a theme that context directly influences access to resources. In Table 4.16, I present the most common ways different contexts access training.

Table 4.16. Most common way to access professional development by teaching context

Rural	Suburban	Urban
University n=26; 35%	School District n=36; 73%	School Districts n=24; 71%
School Districts n=21; 28%	Universities n=9; 18%	Universities n=9; 26%
KSDE n=18; 24%	KSDE n=7; 14%	KSDE n=4; 12%
Service Provider n=10; 13%	Educational Companies n=3; 6%	Self-Development n=2; 6%
Self-Development n=7; 9%	Self-Development n=2; 4%	Service Provider n=0; 0%
Educational Companies n= 3; 4%	Service Providers n=1; 2%	Educational Companies n=0; 0%

State-Supported Literacy Measures

I grouped several providers into initiatives that were associated with either mandates or funding from the state into one code called state-supported literacy measures. This code captured initiatives or mandates that came from the state, or may have been funded by the state, or involved accessing PD directly from the state, outside of LETRS training, which I treated separately. In the survey, I found rural teachers (n=37; 49%) discussed these state literacy measures at higher rates than suburban teachers (suburban n=15; 30%) and urban teachers (urban n= 7; 20%).

Breaking these measures down by subcodes, this trend continues. In the survey, rural teachers reported receiving PD from KSDE at the highest frequency (rural n=18; 24%). Suburban (suburban n=7; 14%) and urban (urban n=4; 12%) teachers mentioned training from KSDE at much lower rates than rural teachers. In the interviews, rural teachers (rural n=4; 80%)

discussed KSDE at higher rates than suburban (suburban n= 1; 50%) and urban (urban n=0; 0% teachers).

Unlike the KSDE trainings in general, suburban teachers mentioned specifically dyslexia training at the highest frequency (suburban n=6; 12%) of the three groups. The training was mandated by the state but could be delivered in-district, which could explain the high rates, as suburban teachers received in-district training at such high rates. Urban teachers (urban n=2; 6%) and rural (rural n=5; 7%) teachers discussed dyslexia training at similar rates. For example, one rural teacher described receiving training from “Bureau of Education, TASN, and KSDE, Smoky Hill.” In the interviews, teachers across contexts discussed the dyslexia trainings, (rural n= 4; 80%; suburban n=1; 50%; urban n=25%), at much higher rates than they discussed KSDE. Unlike the survey, rural teachers discussed the dyslexia training at the highest numbers in the interviews. For example, in the interview, one rural teacher described attending “annual dyslexia training.”

Rural teachers discussed other state specific opportunities that suburban and urban teachers brought up at much lower rates or not at all. For example, rural teachers mentioned TASN (rural n=7; 9%), while suburban teachers mentioned TASN once (suburban n=1; 2%), and urban teachers did not (urban n=0; 0%). Other opportunities included a literacy cadre (rural n=3; 4%; suburban n=0; 0%; urban n=0; 0%); the seal of literacy requirement (rural n=1; 1%; urban n=1; suburban n=0; 0%), and structured literacy courses (rural n=2; 3 %; suburban n=1; 2% urban n=0; 0%), whereas suburban and urban teachers did not mention these consistently.

In-District

When considering the avenues through which teachers access training, overall suburban teachers receive more training in district than urban and rural teachers. Overall suburban teachers

(suburban n=36; 73%) received more training than urban (urban n=24; 70%) and rural teachers (rural n=21; 28%).

When looking at in-district training in a traditional PD setting, suburban teachers (suburban n= 25; 51%) received a statistically significant amount of training compared to urban (urban n= 14; 41%) and rural (rural n=16; 21%) teachers with a p-value of 0.002. For example, one suburban teacher said, “I feel like our district does a pretty good job of providing relevant in-service.” Even though rural teachers (rural n=16; 21%) mentioned in-district training less frequently than the other contexts, this was still the second highest frequency amongst ways they receive training. For example, one rural teacher explains, “I have received some literacy specific training/professional development (Dyslexia training and a PD opportunity focusing on LETRS and the science of reading). These were district provided trainings that occurred twice for Dyslexia training and once for the professional development opportunity.” In the interviews, all three contexts described receiving in district PD, but suburban (suburban n= 2;100%) and urban teachers (urban n=4; 100%) teachers described receive training in their school districts at much higher rates than rural teachers (rural n=3; 60%). In the interviews, suburban and urban teachers discussed their district as the main source of their training. For example, a suburban teacher wrote, “Yes, we experience this type of training or professional development multiple times a year (5-6). This is provided at the district level by our instructional design coaches or experienced teachers and literacy specialists.”

Looking at other ways that teachers access training from their district, shows other differences across contexts. For example, in the surveys, suburban teachers also described leading in-district PD at much higher rates than other groups (suburban n=4; 8%; rural n=2; 3%), whereas urban teachers did not mention leading their own in-district PD (urban n=0;0%). In the

interviews, suburban teachers did not describe leading PD, but rather urban (urban n=2; 50%) and rural (rural n=1; 20%) teachers did.

Urban teachers mentioned getting help from colleagues at the highest rate (urban n=6; 18%; suburban n=6; 12%; rural n=3; 4%). This could be because larger school districts may have more teachers and experts on staff. One suburban teacher describes these experiences with their team, “I have also worked on our reading intervention team for four years, so have been trained in 95 Percent curriculum for use in academic intervention. We received a few days of training upon joining the group and will receive re-ups on certain strategies as needed throughout the year. Our building has lead interventionists who act as intermediaries between us and district reading intervention specialists.” In the interviews, teachers across contexts reported receiving support at similar rates (urban n=1; 25%; suburban n=1; 50%; rural n=2; 40%).

Similar to help from colleagues, in the surveys, urban teachers (urban n=3; 9%) received training from a PLC training at a statistically significant higher rate than suburban (suburban n=3; 6%) and rural (rural n=3; 4%) teachers. Suburban (suburban n=1; 2%) and urban (urban n=1; 3%) teachers described accessing a PD Choice Day, whereas rural teachers (rural n=0; 0%) did not.

In the interviews, an urban (urban n= 1; 25%) and a rural teacher (rural n=1; 20%) both discussed their PLC. For example, the urban teacher discussed implementing a new lesson after being “fresh off of a PLC meeting about science of reading.”

University

Rural teachers discuss university sources at higher rates than any other group (rural n=26; 35%), with suburban (suburban n=9; 16%) and urban (urban n=9; 26%) teachers discussing receiving professional development from universities at lower rates. For example, one rural

teacher wrote, “I have a master’s degree as a reading specialist, which provided me with in-depth literacy training.” In the interviews, teachers across (urban n=2; 50%; suburban n=1; 50%; rural n=2; 40%) contexts discussed university opportunities at similar rates. A rural interview participant described their experiences, “I’m going after a PhD in Curriculum and Instruction with an endorsement in reading specialist, so that’s been really helpful. I’ve gotten to learn a lot of the theory that I was missing before.”

Service Provider

In the surveys, rural teachers brought up service providers at statistically significant higher rates than any other groups (rural n=10; 13%; suburban n=1; 2%; urban n=0; 0%) with a p-value of 0.0107. For example, one rural teacher describes how they access training, “through the Greenbush Service Center..., a presenter has instructed us at least 5 times within the last 2 years.” Another rural teacher explained, “We tend to go with our partners, like Greenbush...Can we have somebody come and present from one of those organizations? We don’t really bring anybody in outside of those organizations just because we’ve already got the partnerships, I guess, and they’re cheaper.” In the interviews, rural teachers discussed service providers, specifically Greenbush; whereas other demographics did not (rural n=3; 60% suburban n=0,0% urban n=0;0%). The frequency these various providers came up was evenly spread, indicating rural people receive training from a variety of places.

Self-Development

In the surveys, rural teachers brought up self-development at higher rates (rural n=7; 9%) than the other groups (suburban n=2;4%; urban n=2; 6%). For example, one rural teacher writes, “I have received literacy training through various resources, mostly sought out by me. I have attended the Literacy cadre put on by Greenbush, I’ve completed structured literacy training by

KSDE, have gone to several workshops/conferences, attended a book study via zoom, and have even provided some professional development to fellow staff members on reading strategies. I always appreciate learning and growing in my field.”

In the interview, all contexts (suburban n=2; 100%; urban n=4; 80%; rural n=4; 80%) described self-development as a form of PD at very high rates. While all demographics discussed self-development in the interviews, rural teachers described seeking it out more than suburban teachers. Rural teachers discussed drawing on their experiences, as experienced teachers (n=2; 40%), whereas urban and suburban teacher did not. Rural (rural n=1; 20%) and urban (n=1; 25%) teachers discussed needing to go out to complete their own reading and research, whereas suburban teachers did not. For example, in an interview, an urban teacher described how they complete a book study on their own, “So if I, if like, there's a, like a specific book that I wanted to do a book study on, I could self-initiate that. The state of Kansas just finished a book study.” An urban teacher (n=1; 25%) also suggested self-development is more effective. They explained “I think that if I had self-directed PD, a lot of that is stuff that I use immediately, like I do my own outside of school conferences on things in the classroom.”

Educational Companies

In the surveys, suburban (suburban n=3; 6%) and rural (rural n=3; 4%) teachers mentioned educational companies, at very low rates, while urban teachers (urban n=0; 0%) did not mention them at all. In the interviews, only one rural (rural n=1; 20%) teacher discussed educational companies. For example, the rural participant explained the educational company “had a whole handbook on the Science of Reading that they sent out.”

Notably Kansan teachers do not attend conferences. With 158 survey responses, only 2 people mentioned attending conferences.

RQ 3: How do secondary Language Arts describe their barriers to literacy professional development within rural, urban, and suburban contexts?

The goal of this research question was to explore how teachers experience, perceive, and describe their barriers to professional development, and if these barriers varied based on the teaching context: rural, urban, or suburban. Table 4.17 gives an overview of how themes answer this question.

Table 4.17. Research questions three and four answered by theme

How do secondary Language Arts teachers describe their barriers to literacy professional development within rural, urban, and suburban contexts?	How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?
Nothing Secondary	PD is helpful for some contexts and unhelpful for others
Literacy is not my job; Literature is my job	Pendulum of Education
Bang for your buck	Mercy of Admin

I used the category “Attitudes” to capture and describe ideas and feelings that came up from teachers throughout the survey and interview responses. Within the category “Attitudes,” codes were used to capture teachers’ “Attitude about PD,” “Attitude about System,” “Attitude about my job,” and “Attitude about literacy.” To answer this research question, I drew on all four attitude categories. The category “Attitude about PD” was used to describe attitudes that were directed towards or were about the PD itself. Some of these ideas and attitudes were about helpfulness, wanting more or less PD, the grade level the PD was directed towards, or specific PD wants. “Attitude about my job” was a category used to capture thoughts and beliefs teachers expressed about what their job was and what their job was not. “Attitudes about Literacy” was used to capture larger thoughts and feelings about literacy. The “Attitude about System,” category was used to capture ideas, beliefs, and feelings directed toward the larger school system

and general state of being surrounding PD. For example, thoughts on who holds the power to provide PD, the school district, choice of training, funding, and culture.

While coding for attitude, three themes emerged capturing the barriers to literacy professional development secondary Language Arts teachers described facing. These themes were “Nothing Secondary,” “Literacy is not my job; Literature is my job,” and “Bang for your buck.” The first theme was “Nothing Secondary.” Nothing secondary came from the category “Attitude about PD.” The theme “Nothing Secondary” specifically refers to the idea that there is nothing available to secondary Language Arts teachers. The second theme that arose was “Literacy is not my job; Literature is my job.” This theme came from the categories “Attitude about my Job,” and “Attitudes about Literacy.” The theme “Literacy is not my job; Literature is my job” was a surprising barrier for secondary Language Arts teachers, which captured the feelings that literacy is not a secondary Language Arts teacher’s job, and instead their job is to teach literature. The final theme that emerged was “Bang for your Buck,” which came from the category “Attitude about System.” The theme “Bang for your Buck” captured the barrier that PD can only be implemented if it is economical enough to the school district. There were three statistically significant results found in the survey regarding attitudes about PD and teachers in different teaching contexts.

Nothing Secondary

The theme “Nothing Secondary” came directly from the code “nothing secondary,” which captured the idea that PD was not geared for or available to secondary teachers, or if secondary teachers were to take the literacy PD, the offerings would be focused on elementary, leaving “nothing secondary.” In the surveys, rural (n=7; 9%) and suburban (n=8; 16%) teachers mentioned that the PD offered “nothing secondary” at significantly higher frequencies than urban

teachers (n=1; 3%). For example, one suburban teacher wrote, “Yes, a little, though it is more directed towards younger grades, so it was difficult to apply to secondary.” Another suburban teacher explained, “Some teachers go through LETRS training, but this seems pretty worthless at the secondary level. We don’t need pedagogy that applies to K-3; we need real strategies that support adolescent learners.” Only one urban teacher mentioned PD was not available for teaching secondary students.

In the interview, suburban (n=1; 50%) and rural (n=4; 80%) teachers expressed concerns that there was nothing secondary for literacy PD, while urban teachers did not (urban n=0; 0%). One suburban participant explained, “As compared to my, my colleagues who are working in the upper elementary and early elementary, I feel like they’re far stronger practitioners and my special ed colleagues across the board are stronger practitioners of how to use specific diagnostic school skills to actually teach people how to read in a very, tangible and specific targeted way.” A rural teacher described this barrier, “I learned all sorts of practices that would work for elementary students, but I didn’t understand how to adapt them.”

Literacy is not my job; Literature is my job

An unexpected barrier to professional development was a belief that literacy is not part of a secondary teachers’ job. I explored this idea through the theme “Literacy is not my job; Literature is my job,” which came from the categories, “Attitude about my job,” and “Attitude about Literacy.

In the survey, all three groups expressed that literacy is not their job (rural n=4; 5%; suburban n=2; 4%; urban n=1; 3%). In the interview, participants echoed the survey responses. Across the three contexts, teachers expressed the idea that teaching literacy is not their job (rural n=4; 80% suburban n=1; 50% urban n=3; 75%). This topic came up in almost every interview (8

out of 11 interviews). During the interviews, one rural teacher captured this sentiment “You know, it’s not just an ELA issue, especially in those upper grades, because you know, high school teachers will look at you, like no, not my work, it’s not my monkey. And that’s not right.” Another rural teacher explained, “I felt very much like I was an English teacher, not a reading teacher, and that’s what college prepared me for.”

To complete this theme teachers reported that, instead, their job was teaching literature. In the survey, rural (n=1; 1%) and suburban (n=3; 6%) teachers expressed that literature was their job. In the interview, teachers in all three contexts expressed that their job is to teach literature (rural n=2; 40% suburban n=1; 50%; urban n=1; 25%). For example, one rural teacher explained, “So for most of my career it's been I know how to teach and analyze literature and teach students how to do that.”

Building on this theme, teachers across contexts expressed that they are not reading teachers who do not know how to teach people to read. In the surveys, suburban (suburban n=1; 2%) and rural (rural n=3; 4%) teachers described not being reading teachers. One suburban teacher writes, “I think the literacy teachers get most of the training,” revealing that while they are an English Language Arts teacher, they do not see themselves as a reading teacher. In another example, one rural teacher expressed this tension “I feel that most high school teachers know how to teach analysis, like close reading, and writing, etc. but we aren't reading teachers, and that feels uncomfortable thinking about it.” One rural teacher describes the issue, “Administrators often assume middle and high school ELA teachers know how to teach struggling readers to read when that wasn’t a part of the secondary teachers’ training.” In the interviews, one urban teacher (n=1; 25%) also expressed that they are not a reading teacher, explaining, “I think we’ve had some reading interventionist options for PD, but they’ve all been optional and usually geared

towards people who are wanting to be trained to become specific reading interventionists in our building.” Through this quote we see that this participant has been offered literacy training specifically but has not taken the offer because they do not identify as a person whose job it is to teach reading and therefore will not be taking the training. In the interviews, rural (n=3; 60%) suburban (n=1; 5-%), and urban teachers (n=1; 25%) expressed not knowing how to teach people to read. “I don’t know how to teach them to read,” one suburban teacher put it bluntly. A rural teacher described it more in-depth, “Well, I’m sure we’ll get to this, but I don’t feel like I was probably as prepared as I should have been, for teaching reading. I took all of the English classes in the world. I got an extensive literature background, but to actually teach kids to read, I know of was a little lost.”

Along with not being reading teachers, rural and urban teachers expressed a belief that literacy is not central, or important to their job. In the surveys, one rural teacher (n=1; 1%) expressed that literacy is not important (n=1; 1%). They write about literacy training, “I don’t know if this would be valuable or not, honestly. I feel like there are other trainings that I would prioritize above this.” In the interviews, one rural teacher (n=1; 20%) and two urban teachers (n=2; 50%) expressed this same concern. When discussing if their district provides training, an urban teacher explained “I don’t know about, like, trainings and things like that. That would be supplemental, but really nice.” This quote reveals that being trained to teach literacy would be supplemental to their jobs.

While teachers believed, “Literacy is not my job, literature is my job,” the category “attitude about literacy” revealed that teachers across contexts expressed an anxiety about literacy. The “attitude about literacy,” category was used to capture different attitudes, beliefs, and opinions around literacy. In the survey rural teachers (n=4; 5%) and suburban (n=1; 2%)

teachers expressed that literacy is a big issue, with rural teachers expressing this at a higher rate. One rural teacher sounded an alarm, “I suppose we’re used to inheriting the work of all the early childhood and elementary experts who teach those basic skills...but if students are lacking those skills when they enter high school, there is NOTHING here to help them unless they are on an IEP.” In the interviews, teachers across contexts expressed this concern as well (rural n=3; 40% urban n=1; 25% suburban n=1; 50%). One rural teacher explained, “I think that’s the elephant in the room. It’s kids. Kids are struggling with their reading.” Alongside this concern, rural and urban teachers expressed a pressure that suburban teachers did not. In the surveys, one rural teacher (n=1; 1%) expressed this, and in the interview, one urban teacher expressed this (n=1; 25%). The urban teacher described the pressure of suddenly teaching a literacy class, “I ended up being given a literacy class, where I was teaching sophomore students who had like 607 Lexile scores.” For reference, this would be a typical score for a 2nd to 4th grader (EBSCO, 2025).

Bang for your Buck

A final theme that addresses teachers’ perception of barriers to receiving professional development is one I am calling “Bang for your buck.” This theme comes directly from an In-Vivo code where teachers identified that the resources their school districts chose for professional development would need to get the most “bang for your buck” to be worthwhile. This theme draws on ideas, attitudes and beliefs teachers’ felt about the larger system they were participating in. A common theme was that teachers felt the amount of PD they were offered or the quality, topic, or theme of the PD came back to getting the most “Bang for your Buck.” I am using this description to umbrella related ideas to the decision-making regarding getting the most “bang for your buck.” This draws from the category “attitude about the system,” which explores more of the systemic barriers teachers described.

In the interviews, all three contexts (rural n=3; 60% urban n=2; 50%; suburban n=2; 100%) reported feeling like PD was chosen based on getting the most “bang for your buck.” One suburban teacher explains how they believe PD is chosen, “I feel like they are trying to get the most bang for their buck when, they're trying to make as many people feel heard and valued as possible. And sometimes that results in everything being a little bit homogenized.” A rural teacher describes the issue by saying, “When we have PD opportunities, you know, I feel like they’re very lackluster where they could be pretty robust if they would bring in some of these things. And I don't think they think that it's cost effective. But it's I mean, if we get everybody on board that's cost effective.” Both of these quotes show PD for everyone can be watered-down and less effective, but the teachers describe it as more cost-effective because it is made available to everyone, and the school district is getting more bang for its buck. In describing the PD that is selected, teachers explained they thought it needed to be applicable across content areas. Additionally, content differences were cited as a reason to not have literacy specific PD. For example, one suburban teacher explains, “We do a lot of strategies that can provide the most bang for our buck in regard to being applicable across content areas. So, vocabulary is often hit upon because all of the content teaches vocabulary”.

Building on the “Bang for your Buck” theme, there were ideas in general about the systematic relationship between professional development opportunities and the stewardship of resources. In the surveys, all three groups indicated that the district does not provide enough PD. Suburban teachers (n=2; 4%) indicated this at a lower rate than rural (n=5; 6%) and urban teachers (urban n=2; 6%). One urban teacher writes, “All of the recent professional development has been more social-emotional centered. I would like to receive meaningful literacy training at least once a year.” In the surveys, on a similar topic, suburban (n=2; 4%) and rural (n=1; 1%)

teachers described feeling like training was being offered or provided to other people, and not them. For example, one suburban teacher explained, “I was going to get LETRS training, but the funding for that was cut. It is now only provided to elementary teachers in my district.” This was expressed across contexts in the interview (rural=1; 20%; suburban n=1; 50%; urban n=3; 75%). For example, one urban teacher speculates, “The majority of the people who go for the focused training, tend to be the elementary teachers...I think the younger teachers are tending to take the opportunities, and the oldest teachers probably are not” A rural teacher wonders, “I know that our elementary school is working on the letters training, but I'm like, well, is that something that we should be doing too?”

Of course, while discussing the theme Bang for your Buck, and public education in general, the topic of funding came up. In the surveys, suburban (suburban n=1; 2%) and rural (rural n=1; 1%) teachers mentioned funding, while urban teachers did not. One suburban teacher describes the role funding plays, “I sought out training in LETRS a few years ago and was granted time/finances for the first unit. Otherwise, any non-district provided training/PD is self-driven.” In the interviews, both rural (n=3; 50%) and urban (n=2; 50%) teachers discussed funding. One rural teacher describes a scarcity of resources, “I'm not sure that our district really sets aside a lot of, you know, of the cash to bring in quality PD.” Conversely, an urban teacher explains, “Well, in years past, if there were professional development books or professional development things that we wanted to attend, the district was very amenable to getting those resources for us, like getting us the books for the book studies or, paying for conferences.”

Despite expressing that PD needed to get the most bang for its buck, in the interview, one rural teacher (n=1; 20%) pointed out that the district has not said no to a PD request. She describes this paradox, “We’re a small school. So, I do think we are limited...and at the same

time, if opportunities are there and people go after them, I have never been turned down.” I think this quote embodies an idea that teachers feel a pressure to be good stewards of money, and they are afraid to ask for too much, even if they have not been turned down. She went on to explain “I try not to ask for more than one conference per year.”

RQ 4: How do secondary Language Arts teachers describe their professional agency and autonomy in rural, suburban, and urban contexts in regard to literacy professional development?

The goal of this research question was to explore how secondary Language Arts teachers experience their professional agency and autonomy, and to consider if these experiences varied based on rural, suburban, and urban contexts. As in research question three, I used the category “Attitudes” to capture these feelings of autonomy and agency, and as described above, the category “Attitudes” is comprised of four codes, “Attitude about PD,” “Attitude about System,” “Attitude about my Job,” and “Attitude about Literacy.” Three themes emerged. The first theme was that “PD is helpful for some contexts and unhelpful for others;” the second theme was the “Pendulum of Education;” and the third theme was “We’re at the mercy of the Admins.” Table 4.13 illustrates the relationships between the themes and this research question.

The theme “PD is helpful for some contexts and unhelpful for others” came from the attitude code “Attitude about PD” and “Attitude about System.” In this theme we see that some teachers describe PD as helpful, while others experience it as unhelpful. Some teachers want more PD in general, others want more choice in PD. This variety is based on contexts, with suburban teachers having more positive experiences with PD than rural and urban teachers. These experiences also influence how teachers express their needs and desire for more PD.

The theme Pendulum of Education came from the attitude codes “Attitude about the system,” “Attitude about literacy,” and “Attitude about my job.” This theme captures teachers’ feelings that the swing of the pendulum of education directly impacts the types of professional development they are offered, as well as their autonomy and choices they have in response to the pendulum. This theme also captures the idea that teachers are responding to a specific moment in time, or that the pendulum is in a specific location.

The theme “We’re at the mercy of the admins” emerged from the attitude codes that arose in “Attitude about system,” “Attitude about literacy,” and “Attitude about my job.” This theme captured the tension between teachers’ attitudes and beliefs that the PD they received, however good or bad, was subject to the direction their administration decided to go in, or the extent to which the administration understood and had solutions to the literacy problems they faced. The feelings of reliance on the administration or district as a whole were in conversation with and balanced by the teachers’ feelings of self-efficacy and ability to teach. These connections are presented in table 4.17.

PD is helpful for some contexts and unhelpful for others

The first theme was the idea that PD is helpful for some contexts and unhelpful for others. Embodying this theme in the survey was the statistically significant code that “PD is helpful” with a p-value of 0.0130. This code was used to capture the sentiment that a PD had been particularly helpful or useful or was something teachers were using in their practice. Rural (rural n=17; 23%) and suburban (suburban n=14; 29%) teachers expressed that PD is helpful at similarly high rates, but only one urban (urban n=1; 3%) teacher brought this up. For example, one suburban teacher explained, “I attended a few consortiums on literacy and fluency...which were valuable. I have been able to consistently apply the coaching and pedagogy gained in these

workshops.” In the interview, teachers from all three contexts (rural n=3; 60%; suburban n=1; 50%; urban n=2; 50%) expressed that PD was helpful. For example, the suburban teacher explained, “So I went to a...training. I was really interested in that one because of specifically teaching literacy to secondary students. And that was beneficial. And I’ve actually used several techniques from that particular one.” The suburban teacher expressed feeling the PD was intentional, and only urban (urban n=2; 50%) and suburban (n=1; 25%) teachers noted they were applying the techniques to their classrooms. For example, the urban teacher explained, “We’ve had a lot of recent emphasis in the last couple of years on teaching vocabulary actively. And I am using those techniques.” The suburban teacher (n=1; 25%) also expressed wanting more time to reflect and plan after the training.

In the surveys, teachers reported evenly across contexts (rural n=9; 12%; suburban n= 6; 12%; and urban n=4; 12 %) that PD is unhelpful. In the interviews, only rural teachers (n=4; 80%) reported that PD was unhelpful. For example, one suburban teacher explains “This training was one day and not nearly comprehensive enough to make me feel confident or prepared.” In both the survey and interviews, teachers reported that the PD was redundant or not relevant or continued the theme of nothing secondary. In the surveys, rural (rural n=2; 3%) and suburban (suburban n=1; 3%) teachers discussed the training being redundant, whereas urban teachers (urban n=0; 0%) did not. Similarly, teachers in all three contexts (rural n=2; 3% suburban n=1; 2%; and urban n=1; 3%) mentioned already knowing the information. In the interviews, one rural teacher (rural n=1; 20%) described PD as redundant and another rural teacher (rural n=1; 20%) described the PD as not relevant. One rural teacher in the interview describes wanting “true PD, true professional development, where people felt like they walked away and they learned new stuff, not the same stuff named a different thing, just actually new stuff.”

In the survey, another statistically significant code was “Wants PD” with a p-value of 0.0189. This code was used to capture teachers’ feelings of wanting more PD than they currently have. Rural teachers brought this up at the highest rate (rural n= 21; 28%); suburban teachers (suburban n=15; 28%) brought it up less than rural teachers. But urban teachers (urban n=2; 6%) only expressed wanting PD twice. For example, a suburban teacher said:

I have not received any literacy-specific training or professional development in my current role. I do believe this type of training would be highly beneficial. Targeted professional development focused on literacy instruction—such as strategies for building reading comprehension, vocabulary acquisition, and effective writing instruction—would strengthen my ability to meet students’ diverse needs and close learning gaps. Ongoing, research-based literacy training would also support alignment with curriculum goals and improve overall student outcomes.

A rural teacher wanted to be able to specifically receive the PD from their school district. They write “If I want to do literacy specific training, I have to find a workshop on my own and request permission to attend. I would really like to have a training at my school for ELA.”

Similar to the survey, in the interview, while all three groups expressed wanting PD (rural n=3; 60%; suburban n=1; 50% and urban n=1; 25%), rural teachers expressed this at the highest rate. For example, one rural teacher explained “I don’t feel like our district does a lot with the science of reading. I think they expect us to go outside to get that, which is kind of frustrating. I would like to see our district do more with it in-house.” Additionally, rural (rural n=1; 20%) and urban (n=3; 75%) teachers discussed wanting more choice in their PD, with urban teachers mentioning this at a much higher rate than rural teachers. In the surveys, rural (rural n=3; 4%)

and suburban (suburban n=1; 2%) teachers wanted more cross-content PD opportunities, but urban teachers did not mention this (urban n=0; 0%).

Looking at wanting more PD a little more in-depth, how each context asked for PD was different. In the surveys, all three groups wanted in-depth PD (rural n=1; 1%; suburban n=1; 2%; urban n=1; 3%). The urban teacher asked for “meaningful literacy training.” Suburban and rural teachers asked for the latest (suburban n=4; 8%; rural n=6; 8%), research-based (suburban n=4; 8% rural n=2; 3%) strategies that aligned with their goals (suburban n=1; 2% rural n=4; 5%), while urban teachers did not have those requests. Rural teachers were also very specific in their requests. One rural teacher explained “I have not received specific literacy-focused professional development from the district. While my background gives me a strong foundation, district-provided literacy training would still be beneficial to ensure alignment with district goals, stay updated on the latest research-based strategies, and collaborate more effectively with colleagues. Regular, targeted literacy professional development could further enhance my instructional practice and support student growth.” Rural teachers had a variety of specific requests, such as wanting collaborative PD (rural n=2; 3%); more frequent PD (rural n=4; 5%); and remedial support PD (rural n=1; 1%); which did not come up in other contexts. In the interviews, the specific, rural-only, requests were wanting more administrative follow through (rural n=1; 20%); wanting help building PD (rural n=1; 20%); and feeling like the district does not provide enough PD (rural n=2; 40%).

Pendulum of Education

The theme the “Pendulum of Education” arose as a driving force or explanation for how PD was chosen or how teachers experienced PD. This theme connected with the category of “Attitude about System,” which showed the ways that teachers’ beliefs, opinions, and attitude

were attributed to the system surrounding education. The pendulum of education in this context is the idea that different trends swing back and forth, as if on a pendulum.

In the interviews, rural (n=2; 40%) and urban (n=1; 25%) teachers expressed that PD was chosen based on the pendulum of education. For example, one rural teacher explained their experiences with Science of Reading, “I had a friend that recommended this thing called Recipe for reading, and then it went into what they called Mega Words. And that whole system is really the science of reading way back then. Like it’s almost like we knew what needed to be done. It just was getting bogged down in all of the values, literacy, or whatever”

Expressing this same idea, another rural teacher, said “One of the things I’ve noticed about education is a lot of things get sort of repackaged with different names.” Along with describing the idea of the pendulum coming back, one rural teacher also explored the idea of the pendulum swinging away. They describe adopting a new system, “They’ve given us all a spreadsheet, and we’re supposed to keep track of when we utilize those types of strategies. That sounds wonderful on paper, but when I get to the end of the day...you’re kind of wiped out anyway...I’m sure there’s some teachers, especially new teachers, that might be like oh they’re going to see it and they’re going to think I’m great. And then there’s the rest of us that are going yeah, yeah, you’re never going to look at that. You’ve probably already forgotten about it”

Along with the movement of the pendulum of education teachers expressed ideas about the current moment in the swing of the pendulum. Teachers wrote and discussed teaching post-covid. In the survey, rural (n=4; 5%) and suburban (n=1; 2%) teachers expressed concerns about a literacy crisis. One rural teacher wrote, “Unfortunately, we are becoming aware that students are not progressing at the rate we expect.” In the interviews, rural (n=3; 60%) and urban teachers (n=1; 25%) discussed these concerns. One rural teacher explains, “I think, especially since

Covid, there's been a lot of discussion about like, yeah, actually we are getting kids at the secondary level who don't know how to read.” Another rural teacher explains “Literacy is a big issue. It’s every time we give some sort of assessment or diagnostic test, it becomes clear that students struggle with reading.”

In the survey, all three groups asked for PD that specifically supported “kids these days” (rural n=1; 1%; suburban n=1; 2%; urban n=1; 3%). For example, one suburban teacher answered if they wanted PD with, “It depends on if it's grounded in reality or not! If it addressed the current realities and struggles of literacy in 2025 rather than just fluffy statements from people who haven't been in a classroom for more than a decade, I'd be interested.” In the interview urban (n=2; 50%) and rural teachers (n=1; 20%) also expressed wanting PD for “kids these days.” One urban teacher explained, “But after covid, there was a shift in how kids are learning words.” Building on this idea of PD for kids these days, in the interview, one urban teacher discussed feelings about students not being motivated, and it is not a teacher’s job to motivate the students. They explained “I don't feel like it's the teacher's job to convince them that you need to be proficient at minimum. You need to be a proficient reader and writer.”

The “Mercy of Admin”

In the interviews, administrators, or lack thereof, was cited as a barrier to receiving quality professional development. Rural teachers (n=4; 80%) described feeling like they had lacked guidance from administration. One rural teacher explained “I think sometimes we are at the mercy of the knowledge or limited experiences of admin. Or we’re at the mercy of whatever they know we have to do.” Building on this topic, rural teachers discussed a lack of guidance, and administration who were busy. One teacher explained “I think it’s up to the admin who are busy doing all their other admin things.” They also want to see administration follow through.

One rural teacher, from the interview said "...probably really through no fault of their own, there's just not a lot of follow through." This also encompassed ideas about the district not providing enough. One rural teacher described feeling like PD comes from administration just checking a box, "So I feel like sometimes maybe it's I don't want to call it checking a box, but the things that they have to do, and so therefore we have to do because they, you know, they have to do these things." These feelings did not present in urban and suburban teachers' responses. Both rural (n=1; 20%) and urban (n=1; 25%) teachers felt like they attend PD because it is mandatory. One rural teacher said "But I did go through, it was mandated for ELA teachers at some point"

These feelings of being at the "Mercy of Admin" fed into larger issues concerning systematic access to solutions. An idea emerged that the teachers do not have solutions, and they are unsure if the administration have solutions either. This was shared in the interviews by rural (n=3; 60%) and urban teachers (n=2; 50%), but it did not present in suburban interviews. Rural teachers overwhelmingly expressed feeling like they did not have solutions. They reported not knowing how to teach students to read, and they expressed a fear that no one knows how to teach students to read. Rural teachers feel like the problems are discussed but training does not happen. For example, one rural teacher explained, "It seems like we talked a lot about it. And I don't, I don't know if we, I don't know if we came up with a solution."

Another barrier that teachers described being at the mercy of staff culture. Both rural (n=3; 60%) and urban (n=1; 20%) teachers pointed to staff culture as a barrier to making gains with PD. One rural teacher explained "It's kind of a, I don't want to say like a culture change, but you've kind of got to get the teachers to realize the value of it." Another rural teacher said, "I

think there's a few teachers that they're going to walk in very jaded and not really listen well the first time.”

Teachers felt like this opportunity lack was systemic. In the survey, teachers across contexts (rural n=5; 7%; suburban n=2; 4%; urban n=2; 6%) reported not feeling like the district offered enough PD. One rural (rural n=1; 1%) teacher expressed that there was no in-district person. In the interviews, rural (n=4; 80%) and urban (n=1; 25%) teachers echoed this same concern. One rural teacher voiced, “We don't have a particular person in our district, and I don't know if if the larger districts have...just a particular person in charge of PD, I don't know.” One urban teacher attributed this a lack of expertise and PD opportunities to the remote location of Kansas in general, saying “I mean, we don't get a lot. I mean, we're in the center of the, middle of the middle, of the United States.” Urban teachers expressed that there is money for books and resources but not training: “I know we, we seem to spend a lot of money on books and curriculum. Although I don't know about, like, trainings and things like that.” Suburban teachers did not express these concerns. Another urban teacher felt like their PD was not streamlined, explaining, “It's not disorganized, but it's not streamlined either because there are so many different. We are all experts in different areas.” One rural teacher expressed wanting outside PD, hoping it would provide collaboration opportunities, explaining “When you go to PD someplace else, even if you go with people you know...you're going to be more, I think, likely to engage with other people outside of your realm that maybe you'll learn stuff from there.”

Teachers expressed wanting choice and autonomy. In the surveys urban (n=3; 9%) and rural (n=1; 1%) teachers discussed wanting more choice. For example, one rural teacher explained they think PD is beneficial but “I would like something I choose.” In the surveys, a rural teacher (n=1; 1%) discussed wanting more autonomy. While they want autonomy, in the

interviews, one urban teacher (urban n=1; 25%) asked for structured autonomy, suggesting a quiz to “figure out which PD you should attend based on how you need to grow and become stronger in your own practices in your classroom.”

Despite these feelings of being at the mercy of administration, at the mercy of the system, teachers had high feelings of self-efficacy. For example, one urban teacher expressed, “95% of the PD that I have received has been from my district, like it’s been required of me,...or I’ve done it on my own, but I like to grow my education.” Two rural teachers (n=2; 40%) expressed feeling like they could teach people to read. For example, one rural describes teaching her own children to read. Another rural expressed feeling like teachers are able, and should, ask for what they need. They explain “I’ve always kind of been one of those people like, well if you don’t ask you never know. And I’ve asked and got to go do some fun things.”

Chapter 5 - Discussion

I've completed this entire dissertation, and I still cannot teach students to read. In fact, I wonder if this dissertation is a continuation of my own internalized attitude that literacy is not my job. When I was a secondary English teacher, my job was not literacy, literature was my job. Now that I am a PhD candidate, literacy is not my job, research is my job. I was subconsciously enacting the very barrier to literacy education I set out to find.

This study reveals that barriers to literacy are structural, systemic, endemic, and internalized. Systemic barriers require systematic solutions. It is not enough to train secondary teachers, but rather, it will take an entire cultural shift to swing the educational pendulum. Opportunities are not distributed evenly across contexts, but when they are made available, teachers participate. This study shines a light on the concern teachers in Kansas have for their students, the hope they have that they themselves can make a difference, and their willingness to try.

This chapter, Chapter 5, explores teaching contexts across the state, the successes, the opportunities, the barriers and the complicated opinions. I present the Summary of the Study, Findings, Conclusions, Implications for Practice, Further Considerations, and Recommendations for Further Research.

Summary of the Study

The problem this dissertation set out to engage with, while in practice is multifaceted, can be summed up simply: some students leave primary school unable to read, and sometimes those students move on to secondary teachers who do not feel confident teaching those students to read. Secondary literacy teachers often feel unprepared to tackle literacy topics (Davis et al., 2018; Doubet & Southall, 2018; Henderson et al., 2018; Lillge, 2019; Traga Philippakos, 2024).

But there are secondary students who arrive in secondary classrooms not prepared for grade-level literacy tasks (Davis et al., 2018; Thomas, 2022). The goal of the larger grant-supported research study is to improve literacy outcomes through targeted supports for secondary Language Arts Teachers in Kansas. The purpose of my specific dissertation research was to capture the strengths, barriers, needs, and experiences with professional development of secondary Language Arts Teachers in rural, urban, and suburban contexts.

This dissertation uses parallel convergent mixed method design. The mixed-method approach allowed me to capture the broader confidence and self-efficacy level of secondary Language Arts teachers with literacy, while also digging into their rich experiences (Creswell, 2014). Data was collected in two phases: a mixed-methods survey and follow up interviews. My dataset included the survey questions with closed-ended Likert scale questions about self-efficacy and one open-ended qualitative question about literacy-centered teacher-training. The follow-up interview asked about experiences with literacy-centered professional development.

I used Thematic Analysis to inform the qualitative coding. Members of the grant-funded research team joined me in coding. During the first round of coding we open-coded, using descriptive coding (DeCuir-Gunby et al., Saldaña, 2021). During the second round, we used axial coding to nestle parent and child codes, creating categories (Williams & Moser, 2019). I used Thematic Analyze to create themes (Braun & Clarke, 2022). The quantitative approach also allowed me to compare experiences across contexts, rural, urban, and suburban. I used an ANOVA analysis to compare the self-efficacy reported on the Likert scale questions. I also used a Chi-Square Analysis to compare the qualitative code frequencies amongst teaching contexts (Creswell, 2014; Johnson & Christensen, 2012). The results of this data analysis is presented in my Findings section below.

Findings

Research Question One: How do secondary Language Arts teachers experience literacy professional development in rural, suburban, and urban contexts?

The Rural Experience

Rural teachers, on a superficial level, receive a typical PD experience, similar to other contexts: they do receive literacy professional development, and it happens 1 to 2 times a year. Most rural teachers reported that they have had literacy focused professional development, with 49 rural teachers (65%) responding that yes, they had had professional development. Rural teachers reported receiving PD 1-2 times a year at the highest frequency, and they reported the other frequencies at much lower rates. For example, they reported receiving PD 3-4 and 5-6 times a year, one time each, monthly two times, and weekly never. Rural teachers also responded “not frequently” one time and “not for a while, twice. As a whole, rural teachers are receiving PD much less often than the other contexts.

It is possible that the typicality of this experience may obscure questions about the quality, the cohesion, or the effectiveness of the PD. For example, if professional development is indeed “checking a box,” as teachers have reported perceiving, building and district administration may feel that the box has been checked as teachers are reporting receiving the typical amount of PD that other districts report. Garet et al. (2001) and Darling-Hammond et al. (2017) explain that PD is more effective when it takes place over a longer period; rural teachers would be better off receiving PD more frequently.

There is a lack of cohesion in the topics rural teachers discuss receiving. Rural teachers reported overall literacy topics at the highest percentage, indicating most rural teachers are trained on some sort of literacy training. But rural teachers reported the five pillars of literacy,

which are specific literacy topics, at the lowest rate. Rural teachers also discussed additional literacy topics, not covered in the five pillars, such as writing and ELL support, at the lowest rates. They discussed non-literacy topics at the highest rate, which suggests a misunderstanding or confusion of what literacy PD looks like, or possibly, a lack of other topics to reference. Taken together, this suggests that while rural teachers are receiving training, it is not coordinated or targeted compared to the other contexts.

Rural schools may be struggling with access due to established issues within rural communities. The lack economic of resources and lower taxpayer bases directly impact the quality of PD. Additionally geographic isolation makes connecting with outside resources more difficult. Coordinated PD approaches take manpower and experience, which rural communities struggle with (Bradley & Feldman, 2021; Liu et al., 2025; Rodriguez et al., 2025). All of these factors compound, so even when rural schools are checking the PD box, they may not be providing the same quality as suburban and urban districts.

When it came to who provides PD to the different contexts, rural teachers accessed state supported literacy measures at much higher rates than suburban and urban teachers. Rural teachers accessed PD from KSDE at the highest frequency. Rural teachers accessed dyslexia training at similar rates to urban teachers, but lower than suburban teachers. Rural teachers also discussed state specific opportunities and trainings at much higher rates than urban and suburban teachers. Because of the funding and resource issues rural schools face, state resources are especially important to rural schools (Liu et al., 2025). This research reveals the direct connection between state initiatives and teaching experiences for rural teachers.

While there are few PD experiences rural teachers mentioned at the same rate as the other contexts, rural teachers accessed LETRS training, which was made available across the state at

the same frequency as the other two contexts. Rural teachers discussed not having had LETRS training at a higher rate than the other contexts, but at a lower rate than suburban teachers. LETRS training has been an important part of the state's Blueprint for Literacy (KSDE, 2025). Similar to LETRS, rural teachers brought up science of reading at a similar rate to the other two contexts. Rural and urban teachers discussed various educational trainings at much higher rates than suburban teachers, which again suggests an ad hoc approach to educational training for rural teachers. The state has the goal of doubling the current LETRS completers (or the testing equivalent) by 2029 (Lane, 2026). This commitment to literacy for all has directly impacted rural teachers. The equitable access to LETRS and SoR reveals the importance of state-sponsored PD opportunities to rural contexts, as it is an opportunity for structured, high quality PD opportunities made widely available.

Rural teachers mentioned in-district training at the second-highest provider of PD compared to their other ways of accessing PD, but it was still accessed at less than half the frequency the other contexts reported. Rural teachers received help from colleagues at dramatically lower rates than the other contexts. To coordinate in-district training and provide help from colleagues, rural teachers need access to experienced colleagues. However, teachers with experience tend to leave rural districts for more urban ones (Liu et al., 2025).

Instead, rural teachers are accessing training through other avenues. Rural teachers discussed university sources at higher rates than any other contexts, and they discussed service providers at statistically significantly higher rates than urban and suburban teachers. Because rural teachers face geographic isolation, universities and service centers may be more accessible (Bradley & Feldman, 2021; Liu et al., 2025). They discussed self-development at higher rates

than the other contexts and educational companies at similarly low rates to suburban teachers, whereas urban teachers did not.

When looking at this together, rural teachers receive the most support from the state, so they truly rely on the state-sponsored measures. While they do receive training in-district, it is not at the same high frequency as suburban and urban districts. Instead of providing their own specific trainings, rural districts are accessing training from service centers, whereas urban and suburban teachers do not. Rural teachers do not have the district and colleague help of other contexts. This leaves rural teachers sourcing from other places on their own such as self development or through university stings.

When considering a few selected attitudes about PD, rural teachers have mixed feelings about PD. Despite these PD struggles, rural teachers found PD to be helpful, and they also report wanting PD at the highest rate. This suggests they want to learn, and they feel a gap in their learning. Conversely, they reported there was nothing secondary, and they also reported not wanting PD at the highest rate. This may be because their less-than-ideal experiences with PD leave them unsure of how quality PD could benefit them.

The Suburban Experience

In keeping with our theme that PD is universal, most suburban teachers also reported having received professional development, with 33 suburban teachers (67%) reporting having had it. Suburban teachers also reported receiving PD 1-2 times a week at the highest frequency. They responded 3-4 times a year at this same high rate and responded 5-6 times a year and month twice. Garet et al. (2001) and Darling-Hammond et al. (2017) suggest PD that takes place over a longer duration, so 3-4 times a year puts suburban teachers in a better position than rural teachers. Suburban teachers did not respond “weekly,” “not for a while,” and “not frequently.”

This consistency is especially significant when considering the targeted topics suburban teachers engage with, meaning they are consistently receiving access to targeted literacy-centered PD. Suburban schools are associated with academic opportunities, such as honor classes and high graduation rates, so a commitment to quality PD is expected alongside the academic rigor (Diamond & Posey-Maddox, 2020; Miller & Schugurensky, 2024).

Suburban teachers discussed overall literacy topics at the second highest rate, less than rural teachers, but more than urban teachers. However, suburban teachers discussed five pillars of literacy at dramatically higher rates than rural and urban teachers. Suburban teachers also discussed non-literacy topics at much lower rates than other contexts. They discussed additional literacy topics at lower rates than urban teachers, but higher rates than rural teachers. The best PD is content focused, and suburban teachers received five-pillars focused PD (Darling-Hammond et al., 2017; Desimone 2009). Taken together, this suggests that suburban teachers are receiving cohesive, targeted, literacy professional development. Guskey (2014) discusses the importance of focusing on student impact, the desired outcome, and the organization's needs when planning PD. Therefore in-district PD is more effective because it allows for focused, effective PD.

Suburban teachers accessed state sponsored literacy measures more than urban teachers but less than rural teachers. Suburban teachers accessed KSDE trainings at much lower rates than rural teachers. Interestingly, suburban teachers mentioned specifically the state sponsored dyslexia training at the highest frequency of the three contexts, which may be because it was organized and delivered in-district. Suburban districts have a greater capacity to coordinate this level of training. They are better staffed enjoy more access to resources due to their affluent tax-base (Diamond & Posey-Maddox, 2020; Miller & Schugurensky, 2024).

Suburban teachers accessed LETRS training, which was made available across the state, at the same frequency as the other two contexts. Suburban teachers discussed they had not had LETRS training at the highest rate, which may indicate that suburban teachers have the highest awareness of PD opportunities. Similar to LETRS, all three contexts brought up Science of Reading at similar rates. This reveals that all contexts will access training if the state is supporting it.

Suburban teachers received more training in district than urban and rural teachers, and this difference was statistically significant. Again, this could be because of suburban districts' access to resources (Diamond & Posey-Maddox, 2020; Miller & Schugurensky, 2024). Additionally suburban teachers discussed leading in district PD where the other contexts did not. Suburban teachers received help from colleagues at lower rates than urban teachers, but at much higher rates than rural teachers. Suburban districts are better staffed, and suburban teachers report an increased opportunity to collaborate professionally compared to other teaching contexts (Castro et al., 2023; Miller & Schugurensky, 2024).

Suburban teachers discussed university and self-development at the lowest rates. Staff in suburban schools are more highly credentialed than other teaching contexts (Castro et al., 2023; Miller & Schugurensky, 2024). They may have not mentioned university offerings because they had already completed their advanced degrees and no longer think of it when they think about PD. Suburban and rural teachers discussed educational companies at similarly low rates. This supports the idea that suburban teachers are receiving high-quality in district training and are supported by their colleagues. They do not need to access self-development, universities, educational companies, or service providers to supplement their in-district PD.

Their expressed attitudes supported this narrative of a high-quality PD experience, as suburban and teachers found PD to be helpful. Suburban teachers did not report that they did not want PD, suggesting they want PD. Suburban teachers did report that literacy-centered PD offered nothing secondary.

The Urban Experience

Urban teachers reported having had literacy focused professional development at the highest frequency of the contexts with 26 urban teachers (76%) responding yes. Like rural and suburban teachers, urban teachers reported receiving PD 1-2 times a week at the highest frequencies, compared to the other frequencies, with seven reporting this. Urban teachers responded to the other frequencies at lower rates. For example, they responded 3-4 times a year only twice, and 5-6 times a year and monthly only once. They did not respond “not frequently,” but they did respond “not for a while” twice. Additionally, urban teachers responded “weekly,” twice, whereas the other contexts did not respond this at all. Urban teachers who are receiving PD weekly may be in the best position, as they receive PD topics over a longer duration (Darling-Hammond, 2017; Garet et al., 2001).

Overall, urban teachers brought up literacy topics at the lowest level. They brought up the five pillars of literacy topics more than rural teachers, but less than the suburban teachers. They brought up non-literacy topics at about the same rate as rural teachers, but dramatically lower than suburban teachers. They also brought up additional literacy topics at the highest rate. Taken together, this suggests urban teachers are receiving a little bit of everything when it comes to PD: they are receiving non-literacy and additional literacy, as well as some five pillars. Because the best PD is content focused (Darling-Hammond, 2017; Desimone 2009), this approach is not as effective as the PD suburban teachers receive. Additionally, this suggest the PD is not being

planned with student impact and the organizational needs in mind, which we know is the best approach (Guskey, 2014). Especially considering the high frequency urban teachers reported for receiving PD, overall urban teachers are receiving a lot of PD, but it is not as cohesive and targeted as suburban teachers report.

Urban teachers access state sponsored literacy measures at the lowest rates. They received training from KSDE at low rates. Urban and rural teachers discussed dyslexia training at similar rates, which was lower compared to suburban teachers. The dyslexia training was available in-district, and urban districts may not have had the same resources as suburban districts to coordinate the training (Liu et al., 2025).

Urban teachers accessed LETRS training, which was made available across the state, at the same frequency as the other two contexts. Suburban and rural teachers discussed not receiving LETRS training at higher rates than urban teachers. This suggests urban teachers may have had more PD to discuss and did not feel compelled to share about the PDs they were not receiving. As with LETRS, all three contexts brought up Science of Reading at similar rates. The similar frequencies with which teachers discussed Science of Reading and LETS indicates that when state policies and supports are behind literacy pushes, all teachers can access it.

Urban teachers received PD in district at much higher rates than rural teachers, but still less than the amount of PD suburban teachers receive in-district. Similar to rural schools, urban schools struggle with funding and resources (Liu et al., 2025). Urban teachers received direct help from colleagues at higher rates than the other two contexts. Urban teachers also discussed receiving training in a PLC format at a statistically significant higher rate than the other PDs. While they are receiving help from colleagues and participating in PLCs, urban districts struggle with teacher turnover and cited colleague culture as a reason for leaving schools (Herman, 2023;

Rodriguez et al., 2025). This may explain why urban teachers receive PD but report being unhappy with it.

Urban teachers discussed PD from universities at higher rates than suburban teachers, but less than rural teachers. Urban teachers did not mention accessing service centers or educational companies. Urban teachers discussed self-development more than suburban teachers, but less than rural teachers. This suggests that urban teachers are receiving PD in district, with less of a need to leave the district for additional support.

However, urban teacher attitude may suggest they are not satisfied with the PD they are receiving. Urban teachers reported that they did not find PD to be helpful at a statistically significantly rate, and they also reported they did not want PD at a statistically significant rate. Urban teachers have reported high pressured state-testing, which may mean that PD focuses on teaching to test (Marco-Bujosa et al., 2020) Like the other teaching contexts, urban teachers reported there was nothing secondary. Interestingly, urban teachers reported they did not want PD at very low rates.

Efficacy and Experiences

As discussed above, self-efficacy is one's capability to attain a certain outcome (Bandura, 1997). Overall, teachers reported higher levels of self-efficacy with broader categories, such as prior knowledge, modeling writing strategies, and providing writing opportunities. These reported levels of self-efficacy are in tension with current literature indicating that teaching writing is a topic teachers report feeling underprepared in (McMahan et al., 2019).

Teachers reported lower levels of efficacy with the topics within of 5 pillars of literacy. Teachers reported higher levels of self-efficacy with reading comprehension and vocabulary. These are topics that teachers reported receiving more training in, which may account for the

higher levels of self-efficacy. However, the mean reported scores are still lower than the self-efficacy levels with writing. Teachers reported the lowest levels in phonemic awareness and phonics.

When it comes to differences across contexts, there were no significant differences between contexts in broader literacy categories. However, with phonemic awareness, suburban teachers had lower levels of self-efficacy than rural teachers; with phonics and fluency, suburban teachers had lower levels of self-efficacy than urban teachers. This difference is surprising, as suburban teachers reported receiving more concentrated training on the five pillars than the other contexts, creating a discrepancy between the amount of training teachers reported receiving and their levels of self-efficacy.

This difference could be explained in a variety of ways. Self-efficacy is contingent to context (Bandura, 1997; Tschannen-Moran & Johnson, 2011). Teachers depend on collective efficacy, as they operate as a collective group (Bandura, 1997). Group efficacy is the belief the entire group can accomplish a goal (Maddux & Gosselin, 2011). Teachers evaluate their administrators, looking for those who serve as educational leaders (Bandura, 1997). Teachers consider both leadership and teaching context when they consider their own self-efficacy (Bandura, 1997). Collective efficacy is built on community and collaboration and contributes to positive school climates (Bandura, 1997; Tschannen-Moran & Hoy, 2011). Teachers in rural schools may feel a higher sense of self-efficacy because of their strong community ties (Liu et al., 2025). Suburban teachers having more exposure to the skills needed to adequately address these topics and therefore doubting their abilities more. Suburban teachers may also be feeling lower levels of self-efficacy as they respond to shifting demographics, which may be causing

them to feel unsure of their teaching contexts (Castro et al., 2023; Diamond & Posey-Maddox, 2020; Miller & Schugurensky, 2024)

Quality of Experiences

The lack of secondary focused professional development opportunities is a universal issue across contexts. The most effective PD is content focused, providing support that teachers can immediately apply in their classrooms (Darling-Hammond et al., 2017; Desimone, 2009). Effective PD supports teachers' knowledge and skill (Guskey, 2014). While currently secondary English Language Arts teachers have participated in elementary-focused literacy content, to be truly effective, secondary opportunities need to be offered to address literacy concerns.

This dissertation reveals a disparity between the quality of professional development rural teachers receive compared to urban and suburban teachers. One issue is in the duration and frequency of PD. PD is more effective when it happens over time, instead of one-off or one-day PDs as it gives teachers time to reflect and apply the strategies before revisiting and learning again (Darling-Hammond, 2017; Desimone, 2009). Because suburban and urban teachers are receiving PD more often, it is much more likely they would be able to receive PD over a time. For example, urban teachers discussed learning in their weekly PLCs, which is a more ideal PD structure than receiving PD only 1 to 2 times a year.

Rural teachers lacked access to the coherent, targeted PD structure that suburban and urban teachers described. Suburban teachers received most of their PD in-district, which gives many advantages for a higher quality PD. High quality PD focuses on the needs of the organization and students, is coherent, and is guided by strategic leadership. When planning PD, districts should consider the time, resources, and skills educators need, and access assessment data to identify areas for student support (Earley & Porritt, 2013; Guskey, 2014). Additionally,

PD is more effective when there is an opportunity for collective participation and collaboration (Darling-Hammond et al., 2017; Desimone, 2009). These benefits are all available to suburban and urban teachers, but not to rural teachers who access PD from a variety of uncoordinated or undercoordinated sources. Additionally, coaching models are possible in districts with resources, such as suburban and urban districts where teachers are already receiving help from colleagues, which is an opportunity rural teacher do not have access to (Garet et al., 2001; Liu et al., 2025).

Research Question Two: How do secondary Language Arts teachers describe their resources, assets, and/or needs related to literacy professional development within rural, urban, and suburban contexts?

Sociocultural theory presents activities as units of analysis. As people engage in these activities, they inherit the established culture and history. People are both shaped by activities, and they, in turn, shape the activity, transforming the culture (Rogoff et al., 1995). This means that as teachers engage in professional development, they both inherit the specific district and schools' culture around PD, and they can shape this culture. As learning happens in contexts, skills cannot be separated from activities, and individuals cannot be separated from the system they are participating in (Rogoff et al., 1995; Wetzel et al., 2019). Therefore, PD is deeply connected to the place in which it is happening.

This dissertation research revealed that policies influence resources, and context influences access. This balance between policy, resources, contexts, and access results in that PD is helpful for some contexts and unhelpful for others. As seen in the dissertation research question above, teaching contexts have different levels of needs. Rural teachers do not have access to the same resources as urban and suburban districts. In fact, urban districts also struggle with economic resources (Bradley & Feldman, 2021; Liu et al., 2025). Kansas is currently

working to credential every elementary teacher in SoR as part of a plan to raise literacy scores across the state (Lane, 2026). This research demonstrates the impact of this effort. When state-supported literacy efforts, such as LETRS training and dyslexia, are made widely available, teachers participate in them equally across context. Therefore, policy can influence these resources, and change a culture of inaccessible or poor quality PD.

Policy is the most effective when it is adapted to context, and policy implementation should include stakeholders, as well as local histories and cultures. Teachers and school districts must work together with the state to effectively implement a policy in order to cause a cultural shift around PD (Barrett-Tatum & Ashworth, 2020). To implement policies that provide resources and address needs, policies will need to be tailored to place.

Learning happens within discourse communities (Lewis et al., 2013). Literacy should be specific to social, cultural, and historical contexts (Frankel et al., 2021). Corbett (2010) writes “Concerns of anthropology, culture, place and identity need to be considered seriously by those engaged in literacy education” (p. 84). Place-based education prepares teachers to teach in context, allowing for specific solutions for the specific communities. By ignoring place, we end up educating children for nowhere (Corbett, 2010). With a consideration of place-based professional development, we can ensure that schools across the state have access to the resources they need.

Research Questions Three and Four: How do secondary Language Arts teachers describe their barriers to professional development, their professional agency and

autonomy in rural, suburban, and urban contexts in regard to literacy professional development?

Considering teachers' perceived barriers, agency, and autonomy regarding literacy focused professional development through the lens of sociocultural theory reveals insights on teacher identity, agency, and power (Lewis et al., 2013). While I initially asked these dissertation research questions separately, I found that the answers intertwined. Identity, agency, and power, are inherently interconnected. Teachers navigate a constant push and pull of barriers, agency, and autonomy within their school contexts. As we will discuss, identity can lead to agency and autonomy, or it can be a barrier. Power and agency can allow teachers to overcome barriers and exercise their autonomy, or the lack of power and autonomy can make even a small barrier impenetrable. Because of these intertwined structures and systems, I address these questions together.

Teacher identity is complicated by a tension between their perceived capacity, their anxiety regarding the literacy crisis, and their agency or lack thereof. Power structures within school districts provide an extra layer of complication, as administrators can serve as either way makers or gatekeepers. Unpacking these complicated attitudes through this lens provides lessons that can be applied in Kansas schools today.

Identity

An unexpected barrier to professional development is teacher identity, where secondary English teachers expressed that "Literacy is not my job; Literature is my job." This identity issue stood in direct tension with an anxiety about the state of literacy in secondary schools today. Teachers reported feeling pressure regarding literacy, expressing that literacy is a big issue, a

crisis even. Teachers were both deeply concerned about their students' literacy skills, while also remaining unconvinced it was their job to intervene.

One facet of this tension is teacher capacity. Teacher capacity is the ability to “perform a certain action” (Koss & Paciga, 2025, p.40). In their study regarding text selection, Koss and Paciga (2025) reported that teachers felt highly capable to select texts for their students. Similarly, in my research, teachers also reported high levels of capacity to select texts. In fact, teachers reported high levels of capacity in some areas, but not in others. For example, teachers felt the most confident with applying knowledge to reading tasks, choosing reading materials, modeling reading and writing strategies, and giving writing opportunities. These capacities all align with a job that is teaching literature. In this way capacity informs identity.

Teachers reported much lower capacity when it came to skills that would align with a literacy-centered teacher identity. For example, teachers reported not feeling confident with phonemic awareness, phonics, and fluency, all skills students must master to learn to read. Along with the Likert responses, in their open-ended survey questions and interviews, teachers reported not feeling prepared to teach literacy as well as not being literacy teachers. This suggests to shift teacher identity we also need to shift teacher capacity.

However, shifting teacher capacity may not be enough. Lewis et al. (2013) remind us that we form identities within community, and that learning takes place within discourse communities. Therefore, we need to build the capacity of the entire community, working within the community. While all teachers reported lower self-efficacy in the five pillars of literacy categories than in the overall literacy categories, suburban teachers reported lower levels of self-efficacy in phonemic awareness, phonics, and fluency at statistically significantly lower levels than urban and rural teachers. This is in direct contradiction to the reported levels of PD topics,

which indicated suburban teachers received more training on the five pillars of literacy than rural and urban teachers. It is possible that suburban teachers' familiarity with phonemic awareness, phonics, and fluency made them question their ability to implement it; whereas urban and suburban teachers did not know what they did not know.

Rogoff et al. (1995) found that even with capacity, teachers must take action. There is a difference between “what an individual *can* do and think...what people *do* do and think...thus the individual cannot be dissected from the activity” (p.144). Essentially, even if teachers were supported in their literacy capacity, they still might not identify as literacy teachers who are responsible for helping secondary students learn to read. Lewis et al. (2013) argue that learning shapes identity, which allows for agency, but the power to enact that agency comes from the community. And people can change communities. This suggests that it will take both teacher capacity and agency to change their identities, but that those communities must also support these identities. We turn to agency next.

Agency

A teacher's literacy-centered identity, with the capacity and self-direction to support students in literacy skills is not enough if teachers lack the agency to make change. Agency plays a central role in sociocultural theory as people have the ability to actively shape their environments (Vygotsky, 1978). Teacher autonomy includes capacity, self-direction, and freedom (Koss & Paciga, 2025). Professional development is a precarious solution to supporting the needs of students and teachers as learning promotes agency, but agency is limited by the constraints of access to learning (Lewis et al., 2013). Essentially teachers need the agency to make changes within their teaching contexts.

Building on their teacher identity, teachers reported high levels of efficacy. They expressed wanting to do the best for their students and wanting to learn more. Koss and Paciga (2025) report that “self-direction is the ability to take personal control over one’s actions, including professional development, to obtain information needed to best perform one’s job” (p.40). Some teachers found PD to be helpful, and they want PD, they want the latest, research-based, and in-depth PD strategies. They see themselves as competent teachers who want to learn more. Some teachers exercised this self-direction and agency by seeking their own PD through self-development.

However, attitudes about professional development reveal agency issues. While teachers expressed wanting to learn, they also expressed frustration that the district does not provide enough PD, and nothing secondary was available. In order for professional development to be helpful, teachers need time, preparation, professional support, agency, and the ability to adapt the curriculum (Barrett-Tatum & Ashworth, 2020; Wetzel et al., 2019). Instead, teachers reported PD often felt like checking a box, was mandated, and took their time away. This led to teachers reporting that they did not want PD, as PD was unhelpful, redundant, and not relevant. Therefore, in practice, instead of building capacity and agency, PD actually acts as a barrier.

Teachers also lack agency regarding the policies behind professional development mandates. In one study on the policy implementation of a new reading program, teachers reported not being in positions of power. They found themselves overwhelmed by the demands of the program while not understanding why. Researchers found information about the policy trickled down to teachers, while being filtered through administration. Each school in the study communicated the policy differently. Despite the confusion and the pressure, it was the coaches and teachers who were in the pivotal roles, not the administration (Barrett-Tatum & Ashworth,

2020). This example reveals a tension where instructional coaches and teachers have the responsibility, but not the agency, for success.

It is ultimately the Language Arts teacher who is our greatest asset in the Reading Wars, but teachers need agency as well as tools in their toolbox. Corbett (2010) argues that specific skill training is not as important as empowering teachers to make theoretically sound decisions in their own classrooms. In another example, teachers saw improvements in students' scores when they learned to utilize and apply the data they were already collecting instead of learning new skills. Previously, teachers had only been working on how to administer assessment, not use results (Barrett-Tatum & Ashworth, 2020). When teacher agency increased, so did the student outcomes. Frankel et al. (2021) found that students responded to teachers who showed flexibility and gave instruction in meaningful context, another reflection of teacher agency. Koss and Paciga (2025) discuss freedom as "ability to select appropriate materials for teaching and learning as impacted by external influences, such as administration, curricular constraints, parent involvement, and/or sociopolitical environment" (p. 41). When teachers have the freedom and agency to choose materials and support their own learning, students benefit.

It is not only teachers who report needing more agency. Students also responded to their own identities and agency being valued. Student curriculum should position students as literacy knowers and doers. When discussing their literacy skills, students stated their personal interests were overlooked in school. Relationships were central to students' literacy experiences, but students appreciated these relationships the most when they were paired with challenging content (Frankel et al; 2021). Teachers must ensure rigor as their own agency, and the agency of their students, is increased. Because "Agency might be thought of as the strategic making and remaking of selves, identities, activities, relationships, cultural tools and resources, and histories,

as embedded within relations of power” (Lewis et al., 2013, p. 18), teachers need the power to make change to the culture as well as the agency and capacity to do so.

Power

Professional development does not happen in a vacuum. Activity systems surround activities, so the activity of professional development exists within a power structure (Lewis et al., 2013). Lewis et al. (2013) call for greater attention to the role of power in learning opportunities, explaining that “learning is shaped by and mired in power relations” (Lewis et al., 2013, p.17). Power structures influence perceptions about problems and their solutions. For example, policies often present students and educators as in need of improvement (Barrett-Tatum & Ashworth, 2020). But examination of these power structures may reveal “The ‘problem’ was not situated in the heads of those children, but in the relationships of power and identity that structured life in the school and in the larger context beyond the school” (Corbett, 2010, p.84). Therefore, we must turn our attention to the school system and larger context.

In my dissertation research, teachers reported feeling the weight of these power structures, speaking to these issues in their attitudes about the system. For example, Lewis et al. (2013) write “that power is produced and enacted in and through discourses, relationships, activities, spaces, and times by people as they compete for access to and control of resources, tools, identities.” (p. 17). Just as self-efficacy, identity, and learning cannot be separated from context, neither can the power structure, and on such structure came from the pendulum of education.

Teachers often discussed the pendulum of education, suggesting they were powerless against its swing, which brought policy trends and highlighted issues for each moment in time. In fact, this concern is so common and so deep that teachers in another study cited policies that

were unsure even existed as a barrier (Wetzel et al., 2019). Teachers discussed literacy being a big issue, as the pendulum has swung to a focus on literacy, as it has in the past. In addition to the weight of the literacy crisis, teachers reported feeling like Science of Reading was everywhere, adding a pressure to learn more about literacy, while also not feeling secondary training was available. Teachers also reported wanting “PD for kids these days,” suggesting feelings of not being prepared or not feeling capable of teaching students in this moment. This pendulum framing suggests that literacy is not a legitimate student need that can be addressed, but rather a trend or fad that teachers are powerless to solve, and that the trend will disappear again with the next pendulum swing, regardless of what the teacher does.

Teachers expressed strong attitudes about the systems they operated in. They wanted more choice and more autonomy in getting professional development. Teachers discussed the culture as a barrier itself, discussing lack of PD opportunities, lack of expertise, lack of in-district people to handle professional development trainings. They felt their school districts lacked funding, or they felt like the money was spent on books or programs, but not training. They felt like the school districts talk about issues but are not training teachers with solutions. In fact, teachers questioned if anyone had any solutions, feeling like they would just have to teach themselves. They questioned if anyone knows how to teach students to read.

With all these issues, teachers reported feeling like they were at the mercy of administrators’ understanding of policies, resources, and understanding; essentially, they could only be as good as the administration. Administration set school norms, culture, and climate, which means school leaders were also a roadblock (Castro et al., 2023; Koss & Paciga, 2025). Teachers reported wanted administration to follow through, but they also perceived administrators as being too busy doing other administrative tasks to handle professional

development or being curriculum leaders. Conversely, strong school leaders can empower teachers, improve morale, and lead in collaboration efforts (Castro et al., 2023). Education policy implementation relies on administrative teams and teachers. Administrators have the greatest responsibility and power. They receive messages directly, interpret the policies, and then distribute the policy messages to teachers, and then require the teachers to implement the policy. (Barrett-Tatum & Ashworth, 2020). While teachers may feel powerless against administration, administration teams may also be an untapped resource for teacher empowerment.

One theme operating within this power structure was a perception school districts must get the most “bang for their buck” while selecting PD, which was an idea that came up throughout the interviews and surveys. This sentiment is not uncommon in education. For example, schools often use teacher leaders to roll out policy change and use personnel resources because of the cost-benefit (Barrett-Tatum & Ashworth, 2020). In this dissertation study, experienced teachers reported leaving room for younger teachers to receive training, even though there was no indication that the district was limiting who could receive the training. This reveals a scarcity mindset and deeply internalized belief about conservation of resources in education. Lewis et al. (2013) reminds us that power over learning is produced and enacted by people, a framing suggests there is room in this system for teachers to enact power to enact change.

Implications for Practice

Federal and State Education Policies

State supports support all contexts. More than a need, there is both an opportunity and a mandate to provide professional development for all teachers across the state. This dissertation study reveals a disparity in the quality of PD and PD resources rural teachers have access to compared to suburban and urban teachers. But equality is not equity. Barrett-Tatum and

Ashworth (2020) found that “Schools with the highest median income and ELA scores and the lowest number of students living in poverty had the highest number of resources” (p.374). This means that schools in Kansas need equitable access to resources.

This dissertation reveals that state-supported literacy measures do reach rural contexts as well as other teaching contexts. Even with wide-spread policy shifts, schools need targeted state support to enact effective policy change. For example, “If schools and districts do not have the same financial opportunities and spending systems in place, they will not have equal opportunities in reform movements” (Barrett-Tatum & Ashworth, 2020, p.373). They found that even when Title 1 schools were given extra funding, they still had so many students of concern, so many needs, that they could not provide the same level of education as schools with more resources. Schools with more resources use additional funding to provide resources to all schools and students, whereas Title 1 schools must choose which students to reach. The policy takeaway is that in order to enact widespread change, we need equitable support for all contexts.

We have the opportunity to improve literacy-centered teaching in Kansas. Corbett (2010) writes “I think good language arts teachers are culturally sensitive social researchers continually asking questions about how language is used here, in this particularly place, and how rich forms of literacy can improve people’s lives here and now” (p.86). We can improve access to literacy skills for our students through Language Arts teachers who are trained and empowered to ask these questions. This can be true of the here and now in Kansas, if we make it true.

District and Building Level Administrators

Culture shapes learning (Vygotsky, 1978), so we need to change the culture to shape learning within districts and buildings. Administrators report feeling the pressure of this responsibility (Barrett-Tatum & Ashworth, 2020). One very simple cultural change this research

has revealed is a need for administrators to be explicitly clear about funding opportunities that are available and encourage teachers to take those opportunities. Teachers reported shying away from asking for too much or taking resources, they perceived as limited. While teachers perceive that they are at the mercy of administration, read positively, teachers have also identified administrators as changemakers.

Corbett (2010) argues that there is power in place-based education, drawing on the strengths of the students and communities. This is power building and district level administrators can immediately harness. We need to focus on changing our instruction instead of trying to change students. This instructional change can be accomplished through changing discourse and policies around literacy (Frankel et al., 2021). Building and district level administrators can shape the story around these policies. Like a tail wagging the dog, teachers and administrators can work together to swing the pendulum of education.

However, as discussed above, Corbett (2010) argues that it is theory, not specific skills, that teachers need to be trained on. He argues that by improving teachers' understanding of the complex social context and communities in which they teach, they will be better able to address the students in front of them. This approach may be the "bang for your buck," administrators are looking for, as it allows them to improve all teachers' abilities without finding content specific skills. Maybe the most bang for your bang is not the PD that is the most widely applicable, but rather, it high-impact specialized supports.

Implications for Teacher preparation programs

There are many lessons for teacher preparation programs in this study. Most obviously, there is a need for targeted literacy for secondary programs regarding the five pillars of literacy, where teachers report not feeling confident. This support is especially important in secondary

English programs. The attitude that literacy is not my job suggests that all secondary programs, not only English, can incorporate a cultural shift that literacy is everyone's job. Cultivating culture begins in the teacher preparation programs.

Along with these specific literacy skills, there is also a need to support preservice teachers in cultivating their sense of agency and their reflexivity (Corbett, 2010). Teachers should feel able to be able to select texts that draw on students' experiences and identities, and this starts teachers connecting with their own identities (Wetzel et al., 2019).

Teacher preparation programs can better prepare preservice teachers for the variety in teaching contexts. While programs systematically place students in diverse settings, there is an opportunity for coursework to consider the implications of these different settings. This includes discussing rural schools. Corbett (2010) calls to empower and train teacher for place-based education. Simply, teachers in Kansas should be prepared specifically to teach in rural areas.

Limitations of Study

One limitation for this study was that it is based on teacher perception. Because the data is self-reported, the dissertation is limited by the teacher's perceptions. For example, this dissertation does not include examples of teacher work in practice or perspectives from administration or district representatives. A case study that involved observations of professional developments, document analysis from school districts regarding several years of their professional development calendars, interviews with school districts that included administration or teacher learning teams would shed more of a light on this topic.

The study is essentially limited by the teachers' own understanding of the systems they are embedded in. For example, district-level administration tended to serve as a placeholder for

teachers' perspective of much larger socio-political workings which impacted the teachers' daily lives.

The dissertation was also limited by the geographical areas that were represented. While there was a robust set of participants across the state, not every county had representation. The voices from these areas remain unheard.

Recommendations for Future Research

This study revealed unexpected barriers to literacy instruction, including teacher attitudes regarding literacy and disproportionately available resources, but it also revealed an unlikely hero: state policy. While teachers often identify state policy as bureaucratic red tape, this research indicates state support helps teachers. There is a need for additional research specifically in Kansas regarding the impact of state policy and teaching contexts. Additionally, there is a need to further explore teacher agency, attitude, and school culture around literacy. This study suggests increased teacher capacity along with increased teacher agency could positively impact students, but that this can only happen in teaching contexts with enough resources. There is a need to explore this further.

In addition to teaching contexts in Kansas, there is more to unpack regarding specifically successful professional developments. This study could easily transition into a case study involving districts from specific teaching contexts and include document analysis of PD opportunities over the years, alongside interviews with administration, instructional coaches, directors of teaching and learning, and teachers. Student work and data, while often elusive, would also demonstrate the impact of professional development. There are large gaps in research in secondary literacy and education in Kansas, and this research reveals opportunities for growth as much as it answers questions.

Future research could examine the role of economic and community resources on literacy resources and training in school districts. A study conducted in the Kansas City area found there were differences in the quality of training between economically disadvantaged urban schools and urban schools in higher socioeconomic areas (Johnson, 2009). While we examined teaching contexts from a teachers' perspectives and experiences, we did not have access to the socioeconomic and funding situation of each school district and teaching context, which would be an additional layer to explore.

Summary

This study utilized a small portion of data from a larger grant-funded research study conducted at by a midwestern, land-grant public R1 university with the goal of better understanding and supporting literacy at the secondary level for students in Kansas. The purpose of this dissertation was to describe teachers' experiences with literacy strategies and their access to resources to support their professional development in improving their literacy praxis. Data for this study was collected in two phases: a broader mixed-methods survey with 160 participants, asking teachers' to rate their own feelings of literacy self-efficacy and to describe their own experiences with literacy focused professional development, as well as follow-up interviews with 11 participants further exploring these experiences. Following a convergent parallel mix-methods design, I used thematic analysis to code, categories, and theme the qualitative data. My analysis was informed by sociocultural theory, as I considered the agency, power, and identity secondary Language Arts teachers bring to their understanding of literacy professional development. This research reveals the significance of teaching-contexts when it comes to both literacy instruction and access to resources to enact literacy instruction.

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Appendix A - Qualitative Codebook

Category: Existence				
CODE	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
Existence Yes	This captures that teachers' perception that had received literacy centered professional development.	"Yes, we have this option at our quarterly in-service sessions."	Teachers explicitly answering yes, or the overall conclusion was yes.	Teachers explicitly answering no.
Existence No	This captures that teachers' perception that had not received literacy centered professional development.	"We have not had any literacy-specific training for several years. I would welcome such training if it were offered."	Teachers explicitly answering no, or teachers asserting that they had not literacy professional development, even if they referenced some	Teachers explicitly answering yes, or the overall conclusion was yes.
Category: Frequency				
Frequency 1-2 Times a Year	This captures teachers' description of receiving professional development totaling 1 to 2 times a year.	"Our trainings in literacy are usually once a semester I believe."	Teachers explicitly answering 1 time a year, 2 times a year, or 1-2 times a year, or another response that would total or average 1 to 2 times a year.	Teachers directly or in-directly referencing an amount totaling more than 1-2 times a year.
Frequency 3-4 Times a year	This captures teachers' description of receiving professional development totaling 3 to 4 times a year.	"We have in-house PD on implementing vocabulary and reading strategies about 3-4 times per year."	Teachers explicitly answering 3 time a year, 4 times a year, or 3-4 times a year, or another response that would total or average 3 to 4 times a year.	Teachers directly or in-directly referencing an amount totaling more or less than 3-4 times a year.
Frequency 5-6 Times a Year	This captures teachers' description of receiving professional development	"We experience this type of training or professional development	Teachers explicitly answering 5 time a year, 6 times a year, or 5-6 times a year, or another	Teachers directly or in-directly referencing an amount totaling more than or less

	totaling 5 to 6 times a year.	multiple times a year (5-6)."	response that would total or average 5 to 6 times a year.	than 5-6 times a year.
Frequency Monthly	This captures teachers' description of receiving professional development each month, or 7, 8, or 9 times a year, which would average monthly in a school year.	"Our building wide goal is to improve cross curricular vocabulary, and once a month at our professional development session, we receive specific training organized and implemented by our reading team and/or instructional coach regarding vocabulary."	Teachers explicitly answering monthly, 7, 8, or 9 times a year, or another response that would indicate or average to monthly PDs throughout a school year.	Teachers directly or in-directly referencing an amount totaling or averaging to more or less than monthly PDs.
Frequency Weekly	This captures teachers' reference to receiving professional development happening weekly.	"We have PD almost every week in our building."	Teachers explicitly answering 1 time a year, 2 times a year, or 1-2 times a year, or another response that would total or average 1 to 2 times a year.	Teachers directly or in-directly referencing an amount totaling more than 1-2 times a year.
Frequency Not Frequently	This captures teachers' perception that the professional development training did not happen frequently.	"A regular training for the ELA department does not exist "	Teachers explicitly referencing that the PD did not happen frequently.	Researchers' perception of the training not being frequent.
Frequency Not for a while	This captures teachers' perception that the professional development training did not happen frequently.	Yes, but not for quite awhile.	Teachers explicitly referencing the PD had not happened for a while.	Researchers 'perception of the training not having happened for a while.
Frequency A Little	This captures teachers' perception that they only received a small amount of	"Yes, a little,"	Teachers explicitly. Saying they had had a little PD	Researchers' perception that the training was a small amount.

	professional development. While not a frequency amount, it adds teachers' perception to the frequency.			
Frequency Many	This captures teachers' perception that they received many instances of professional development. While not a frequency amount, this adds a teachers' perception to the frequency.	"I've received several different kinds of literacy training over the course of my career."	Teachers explicitly saying the PD was happening often or they had many trainings.	Researchers' perception that the training was happening often, or there were many of them.

Category: Topic				
CODE: Topic	Definition	Example Quotes	Inclusion Criteria	Exclusion Criteria
Overall Literacy	This encompassed all of the subcodes that covered literacy specific topics, as well as literacy topics that were generic literacy topics not enumerated in a sub code.		This code captured all of the literacy topics in the Topics category.	All of the "Not Literacy Topics" were excluded.
Overall 5 Pillars	This encompassed all of the 5 pillars of literacy topics, as well general references to the 5 pillars of literacy.		This code captured all of the 5 Pillars of Literacy topics, both generic and specific.	This excluded Not Literacy Topics, as well as literacy topics that were outside of the 5 pillars.
5 pillars of Literacy	This captured general references to the 5 pillars of literacy.	"I use FastBridge to test and it has informational units on fluency teaching that I have read. I was looking into the state provided literacy training."	This code captured general references to the 5 pillars of literacy.	This excluded non-literacy topics, and topics outside of the 5 pillars of literacy.

Phonics	This captured specific referencing to phonic instruction or skills.	“LETRS teaches the skills needed to master the fundamentals of reading instruction: phonological awareness, phonics, fluency, vocabulary, comprehension, writing, and language.”	This code included only explicit references to phonics, or a clear description of phonics skills.	This code excluded non-literacy topics, general literacy or 5 pillars references, and references to other 5-pillars skills.
Phonemic Awareness	This captured specific reference to phonemic awareness instruction or skills, including morphology.	“Much of our instruction has come from TNTP or focused on Morphology.”	This code included only explicit references to phonemic awareness, or a clear description of phonemic awareness skills.	This code excluded non-literacy topics, general literacy or 5 pillars references, and references to other 5-pillars skills.
Vocabulary	This captured specific references to vocabulary instruction or skills.	“Like I mentioned before, we've had Greenbush and KSDE train us mostly on vocabulary strategies.”	This code included only explicit references to vocabulary, or a clear description of vocabulary skills.	This code excluded non-literacy topics, general literacy or 5 pillars references, and references to other 5-pillars skills.
Fluency	This captured specific reference to fluency instruction or skills.	“Several years ago, I attended a few consortiums on literacy and fluency through ESSDACK, which were valuable.”	This code included only explicit references to fluency, or a clear description of fluency skills.	This code excluded non-literacy topics, general literacy or 5 pillars references, and references to other 5-pillars skills.
Reading Strategies	This captured specific reference to reading or reading comprehension strategies or skills.	We have in-house PD on implementing vocabulary and reading strategies about 3-4 times per year.	This code included only explicit references to reading strategies, or a clear description of reading or comprehension skills.	This code excluded non-literacy topics, general literacy or 5 pillars references, and references to other 5-pillars skills.
Literacy Training	This captured general literacy training.	“We have district-mandated literacy instruction, something like an	This code encompasses references to	This code excludes non literacy training, references to the 5

		hour or two each year.”	general literacy training.	pillars of literacy, and references to specific topics.
Text Complexity	This captured training on text complexity.	“I also have received training on Vocabulary, Morphology, Text Complexity, etc.”	This code captures teachers’ explicit references to text complexity.	This code This code excludes non literacy training, references to the 5 pillars of literacy, and, general literacy training, and references to other specific topics.
Writing	This captured writing strategies or writing instruction or skills.	“I attend Cavalier Writing Conference through JCCC each spring.”	This code captured teachers explicitly referencing writing strategies.	This code excludes non literacy training, references to the 5 pillars of literacy, general literacy topics, and references to other specific topics.
ELL	This captured PD that supported ELL students.	“I’ve had training through my corporates and past cooperatives on literacy, phonics, ELL, spelling, fluency.”	This code captures teachers explicitly referencing ELL students.	This code excludes non literacy training, references to the 5 pillars of literacy, general literacy references, and references to specific topics.
State Standards	This captured PD that focused on using the state standards, or using the state standards in place of a PD training.	“Each year before school starts we go through our standards and align them across grade levels.”	This code captured teachers explicitly referencing “state standards.”	This code excludes non literacy training, references to the 5 pillars of literacy, and references to specific topics.
Not Literacy Training	This code was used to capture teachers’ referencing PD topics that were not literacy related, even though they were specifically asked about literacy topics.	“We received some training on Project-Based Learning.”	This code captures teachers’ referencing general non-literacy topics.	This code excludes references to literacy topics, or specific non-literacy topics seen below.

LMS	This is a subcode of Not Literacy Training. LMS stands for Learning Management System and was used to capture training on the LMS, such as Canvas or Google Classroom.	“We do have professional development in-service days but recently they have been on areas such as AI, Canvas, vocabulary, etc.”	This code captures references to Learning Management system instead of literacy topics.	This code excludes references to literacy topics, or other specific non-literacy topics other than LMS.
AI	This is a subcode of Not Literacy Training, and was used to capture references to training on using AI.	“I have taken Science of Reading classes and AI classes provided by service centers and universities.”	This code captures references to AI instead of literacy topics.	This code excludes references to literacy topics, or other specific non-literacy topics, other than AI.
MTSS	This is a subcode of Not Literacy Training, and it was used to capture references to training on MTSS, or multi-tiered support systems, which is a school-wide approach to remediation.	“The other English teacher and I were signed up to receive MTSS training.”	This code captures references to MTSS instead of literacy topics.	This code excludes references to literacy topics, or other specific non-literacy topics, other than MTSS.
SEL	This is a subcode of Not Literacy Training. SEL stands for Socio-Emotional Learning, and was used to capture references to learning about social or emotional topics.	“All of the recent professional development has been more social-emotional centered.”	This code captures references to SEL instead of literacy topics.	This code excludes references to literacy topics, or other non-literacy topics, other than SEL.

Category: Type of Training				
CODE: Type of Training	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
LETRS Yes LETRS	This code captured teachers describing that	“Yes, LETRS by LETRS in our	This code included teachers reporting they had	This code excluded people reported they had

	they had had LETRS training.	district over the last two years.”	had LETRS training.	not had LETRS training.
Overall No LETRS	This code captured all of the teachers who had not had LETRS training.		This code included teachers who mentioned not having LETRS training for any reason.	This code excluded people who had had LETRS training.
No LETRS	This code captured that teachers had not had LETRS, and they did not give a specific reason why.	“I have not received the LETRS training yet. It would be very beneficial.”	This code included teachers who mentioned not having LETRS training, but did not cite a specific reason.	This code excluded people who had had LETRS training and teachers who gave a reason as to why they were not taking LETRS training.
No LETRS -Not Relevant for my students	This code captured teachers who had not had LETRS and explained it was because they did not think the training would be relevant for their students.	“The only thing this district currently offers is LETRS, which is a wonderful PD, but not entirely relevant to the level of English that I teach unless I am specifically helping students at lower reading levels.”	This code included teachers who mentioned not having LETRS training specifically because they did not think it was relevant for their students.	This code excluded people who had had LETRS training and teachers who gave a different reason for not taking LETRS training.
No LETRS Plan to Take	This code captured teachers who had not had LETRS and explained they were planning on taking it.	“No, but I will be doing LETRS training starting in the fall.”	This code included teachers who mentioned not having had LETRS training yet, but they were planning to take it.	This code excluded people who had had LETRS training and teachers who gave a different reason for not taking LETRS training.
No LETRS No Funding	This code captured teachers who had not had LETRS and explained it was because there was no funding.	“No. I was going to get LETRS training, but the funding for that was cut.”	This code included teachers who mentioned not having LETRS training, citing a lack of funding as the reason.	This code excluded people who had had LETRS training and teachers who gave a different reason for not taking LETRS training.

No LETRS Not Available to Secondary	This code captured teachers who had not had LETRS and explained it was because it was not available to secondary teachers in their school district.	"I have not gone through LTRS training and it does not seem like my district has plans on having the secondary English teachers go through LTRS training."	This code included teachers who mentioned not having LETRS training, explaining that it was not being made for secondary teachers in their area.	This code excluded people who had had LETRS training and teachers who gave a different reason for not taking LETRS training.
No LETRS Experienced Tacher	This code captured teachers who had not had LETRS and explained it was because they felt they were an experienced teacher who did not need it.	"I taught K-2 for 14 years...Take one of three designated tests was an option in place of LETRS training. (I passed!)"	This code included teachers citing they were an experienced teacher as the reason they had not taken LETRS.	This code excluded people who had had LETRS training and teachers who gave a different reason for not taking LETRS training.
Science of Reading	This code captures teachers who mentioned they had had Science of Reading Training	"Yes. I have taken Science of Reading classes."	This code included teachers explicitly mentioning Science of Reading Training.	This code excluded other types of training.
Various	This code captured different trainings, such as from educational companies or programs.	"I have attended two AP Literature and Composition workshops/trainings."	This code included references to other types of training, such as specific programs.	This code excluded mentions of Science of Reading and LETRS training.

Category: Provider				
CODE: Provider	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
Overall State Supported	This code captured teachers describing accessing opportunities from state organizations, policies, funding, or otherwise supported by the state.		This code includes any initiative that was supported by the state.	This code excludes opportunities offered by private companies, universities, service providers, and school districts.

KSDE	This code captured teachers describing accessing opportunities from the Kansas State Department of Education.	"I have received roughly 15 hours of training in dyslexia and structured literacy. The trainings were provided by KSDE and/or district staff."	This code includes opportunities that were supported or created or provided by KSDE.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
TASN	This code captured teachers describing accessing opportunities from TASN.	"Yes, from TASN. Every 9 weeks."	This code includes opportunities that were supported or created or provided by TASN.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
Reading Roadshow	This code captured teachers describing attending a Reading Roadshow opportunity.	"I go to Reading Roadshow (TASN) every year to see what is new in reading research."	This code includes opportunities that were included in the Reading Roadshow.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
Dyslexia	This code captured teachers describing accessing training through state sponsored dyslexia training mandates.	"I have attended recent literacy trainings regarding the state dyslexia initiative."	This code includes opportunities that were connected to the the state mandate for dyslexia training, regardless of if the training was provided in district.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.

Literacy Cadre	This code captured teachers describing accessing opportunities from the Literacy Cadre.	“I have attended the Literacy cadre”	This code includes opportunities that were provided by the Literacy Cadre.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
Seal of Literacy	This code captured teachers describing accessing opportunities specifically because of the incentive of gaining the Seal of Literacy.	“I have asked about obtaining my literacy seal for my license and my IC said that is something she can help with.”	This code includes opportunities that were motivated by the State opportunity for a Seal of Literacy.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
Structured Literacy Course	This code captured teachers describing accessing opportunities from the Structured Literacy Course.	“I’ve completed structured literacy training by KSDE”	This code includes opportunities that were supported or created or connected to a Structured Literacy Cadre.	This code excludes Other state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and school districts.
University	This code captured teachers describing accessing opportunities from a University setting.	“I have my masters in Curriculum Instruction.”	This code includes opportunities that were connected to a university.	This code excludes state sponsored PDs, and other opportunities offered by private companies, service providers, and school districts.
Overall District	This code captured teachers describing accessing		This code includes opportunities that were supported or created or	This code excludes state sponsored PDs, and other

	opportunities provided by their district in any capacity.		provided by school districts.	opportunities offered by private companies, universities, and service providers.
In District	This code captured teachers describing accessing PD through traditional In District professional development opportunities.	“This is provided at the district level by our instructional design coaches or experienced teachers and literacy specialists.”	This code includes opportunities that were supported or created or provided inside the traditional school district.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and other school districts opportunities.
Colleague Help	This code captured teachers describing accessing opportunities from their district through Colleague Help.	“One of my colleagues is a reading specialist who is thoroughly trained in this, and she has helped me when I come to her with specific questions.”	This code includes PD that provided through help directly from colleagues.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and other school districts opportunities
PLC	This code captured teachers describing accessing opportunities from their district through PLC communities.	“Our PL coach gives different literacy trainings during our weekly professional learning days.”	This code includes PD that provided through PLCs.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and other school districts opportunities
I provide the training	This code captured teachers describing that they provide the PD opportunities for other teachers.	“I have also worked on our reading intervention team for four years, so have been trained in 95 Percent curriculum for use	This code includes a sentiment that the teacher provided training to others in the school district.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, service providers,

		in academic intervention.”		and other school districts opportunities
PD Choice Day	This code captured teachers describing accessing opportunities through their districts on a PD day, where they have the opportunity to choose.	“Our district also hosts ‘Choice PD Day’ every February; I have both attended and lead several breakout sessions on literacy strategies in the ELA classrooms throughout my tenure.”	This code includes teachers’ description of accessing PD from their school district, where they had the opportunity to choose from a variety of topics.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, service providers, and other school districts opportunities
Service Provider	This code captured teachers describing accessing opportunities from PD service providers, such as Greenbush, Smoky Hill, etc.	Yes, through the Greenbush Service Center...a presenter has instructed us at least 5 times within the last 2 years.	This code includes opportunities from specific PD service providers in the state of Kansas, such as Greenbush.	This code excludes state sponsored PDs, and other opportunities offered by private companies, universities, and school districts opportunities
Various Educational Companies	This code captured teachers describing accessing opportunities from private educational companies, either through their district or outside.	I also receive some training from HMH because our school is implementing Read 180 for our MTSS.	This code includes opportunities provided by educational companies, including both in and out of the school district.	This code excludes state sponsored PDs, and other opportunities offered by, service providers, and other school districts opportunities
Self Development	This code captured teachers describing accessing opportunities themselves, by going outside of their school district to access opportunities, reading on their own.	If I want to do literacy specific training, I have to find a workshop on my own and request permission to attend. I would really like to have a training at my school for ELA.	This code includes opportunities that were found outside of traditional PD opportunities, where teachers looked on their own to further their own education through opportunities like workshops, reading on their own, etc.	This code excludes Traditional PD opportunities such as state sponsored PDs, opportunities offered by private companies, universities, service providers, and school districts.

Category: Attitudes; Attitude about PD				
CODE: Attitudes	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
Helpful	This code captured an attitude expressed by teachers that PD was helpful.	"PD at my school. It was helpful."	This code encompassed both specific PDs teachers attended and a general attitude about PD	This code excluded teacher rhetoric that PD was unhelpful.
Unhelpful	This code captured an attitude expressed by teachers that PD was unhelpful.	"Yes, but it is not up to date or relevant to our current population of students"	This code encompassed both specific PDs teachers attended and a general attitude about PD	This code excluded teacher rhetoric that PD was helpful.
Nothing Secondary	This code captured an attitude expressed by teachers that the PD does not offer any specific lessons for secondary students.	"I realized that while we are now doing better at getting our younger children in science of reading, we have this gap with our middle and high school kids not having had that science of reading."	This code included both references to PD that teachers had taken or was used to capture a teacher expressing this was the reason they had not taken the PD.	This code excluded teacher rhetoric that they were satisfied with the PD.
Does Not Want PD	This code captured an attitude expressed by teachers that teachers did not want more PD.	"I don't feel that I need it after getting my MA in English, but a refresher in the future may be nice."	This code included both instances of teachers not wanting PD in general, and teachers not wanting anymore PD.	This code excluded rhetoric of teachers wanting PD in general or wanting more PD.
Wants PD	This code capture an attitude expressed by teachers that they wanted more PD.	"I think it would be beneficial if it was geared towards teaching students at the high school level who struggle with fluency and comprehension. I sometimes get caught up teaching the	This code included instances of teachers wanting more PD than the currently received as well as not receiving PD	This code excluded teachers who were satisfied with the amount of PD they received.

		literary elements and do not realize I also need to address just getting through the text with a coherent picture of what is going on.”		
In-Depth PD	This code capture an attitude expressed by teachers that they wanted literacy support that dug deeper into the literacy issues.	“Like if we have PD when we have PD opportunities, you know, I feel like they're very lackluster where they could be pretty robust if they would bring in some of these things.”	This code included teachers specifically asking for PD that was more in-depth.	This code excluded teachers who were satisfied with their PD.
Remedial Struggling Reader	This code capture an attitude expressed by teachers that they wanted PD for struggling readers.	“Administrators often assume middle and high school ELA teachers know how to teach struggling readers to read when that wasn’t a part of secondary teachers’ training.”	This code included teachers rhetoric that they wanted PD that would help students who were struggling.	This code excluded teachers who were satisfied with their PD, or who asked for PD for other issues.
More Frequent PD	This code capture an attitude expressed by teachers that they wanted PD more frequently.	“I think it would be beneficial to have a literacy refresh training at the beginning of every school year, especially as every teacher has a literacy class every day!”	This code included teachers who specifically expressed that they wanted the PD to happen more often.	This code excluded teachers who were satisfied with their PD, or who asked for more PD in general.
Collaborative PD	This code capture an attitude expressed by teachers that they wanted PD that allowed them to collaborate with their co-workers.	“While my background gives me a strong foundation, district-provided literacy training would still be beneficial to	This code included teachers expressing that they wanted PD that would allow them to collaborate with their colleagues,	This code excluded examples of teachers actually collaborating.

		ensure alignment with district goals, stay updated on the latest research-based strategies, and collaborate more effectively with colleagues.”	or that they wished they had colleagues to collaborate with.	
PD as checking a book	This code capture an attitude expressed by teachers that PD is given just to check a box.	“So I feel like sometimes maybe it's I don't want to call it checking a box, but the things that they have to do, and so therefore we have to do because they, you know, they have to do these things.”	This included teachers’ views that PD was checking a box, or that they thought their school district presented PD as checking a box.	This excluded people who were satisfied with their PD or who had positive attitudes towards PD.

Category: Attitudes; Attitude about system				
CODE: Attitudes	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
Cross-Curricular Literacy Ideas	This code captures teacher attitude that the district educational system should include more opportunities for literacy professional development across content areas.	“I would like some training on cross-curricular literacy ideas.”	This code includes references to a desire to share responsibility with other content areas, instead of being about actual literacy ideas.	This code excludes a general attitude about literacy and instead focuses on the structure of the system.
District Does Not Provide Enough	This code captures the teacher attitude that the district does not provide enough PD.	“Most districts will only provide LETRS training for elementary. 6-12 teachers often times must figure it out on their own.”	This code includes teacher attitude that the district should provide more and that the district has a responsibility to provide PD that it is not meeting.	This code excludes teachers who were satisfied with their school district and the amount of PD they were receiving.
Choice	This code captured a teacher desire for choice when it comes to PD.	“Our entire district attended it for two years. I think it was beneficial, but I	This code included references to teachers having choice in PD and	

		would like something I choose.”	teachers wanting choice in PD.	
Other people get the training	This code captured a teacher attitude that other teachers in the district received training instead of the them.	“I was going to get LETRS training, but the funding for that was cut. It is now only provided to elementary teachers in my district.”	This codes includes teacher attitude that other teachers in the district or that they explicitly knew were getting training instead of them.	This code excludes people who felt they had had adequate training, or more general attitudes about people in other districts having access to training.
Wants Autonomy	This code captured teacher attitude that they wanted more autonomy within their school district than they were currently receiving.	“But like, if they sent out a questionnaire that was like, hey, take this quiz that we made and figure out which PD you should attend based on how you need to grow and become stronger in your own practices in your classroom.”	This code included teacher desire to have more autonomy when it came to choosing their PD.	This code excluded teachers who expressed they had autonomy or who did not express a desire for more autonomy.
No In-District Person	This code captured a teacher attitude towards their school district that there was not a person in the school district to accomplish a task or provide support.	“We're a small school. So I do think we are limited.”	This code included a general desire for more in-district people, as well as stating a fact that there was not a person in district to provide a specific support, including speculation that other districts may have a person who provides that support.	This code excluded references to specific people who were providing support in district.
Funding from District	This code captured teacher references to the funding that the district was able to provide.	“I am currently taking LETRS training. My district is paying for the training and is compensating me	This captured references to the district providing funding for either a private opportunity or a funding a general PD opportunity.	This excluded opportunities that were self funded, or references to trainings that the district turned down.

		hourly for my efforts.”		
No funding from district	This code captured teacher references to the school district not funding something.	“We had two members, of our staff that wanted to go. One is a board member of, of KATE, and, and the district didn't, cover any of the expenses for that, for either of us to go to that trip.”	This included teacher attitude that the district should be funding something or that training would be possible if the district were funding it.	This excluded references to the district funding a training successfully.
Pendulum Influence Directions	This code captures the teacher attitude that the pendulum of education influences the decisions happening within the district.	“One of the things I've noticed about education is a lot of things get sort of repackaged with different names.”	This code encompasses a general opinion that the pendulum of education was affecting and influencing decisions that the school district was making, or the system in general.	This code excludes teacher rhetoric that pointed to specific reasons that a decision had been made.
Bang for your Buck	This code captured teacher attitude that PD was a good value, or that PD had been chosen because it was a good value.	“We don't really bring anybody in outside of those organizations just because we've already got the partnerships, I guess, and they're cheaper.”	This code included teacher rhetoric and perceptions that the school district only chooses PD if it provides enough of a value.	This code excludes an evaluation of the PD's value, and instead focuses on teacher perception.
System is a Barrier	This code captures teacher attitude that the system, be it the school district or the state, in general acts as a barrier to accessing PD.	“My PD opportunities were all connected to my employment from the district.”	This code includes teacher rhetoric and references to barriers within the system.	This code excludes teacher references to barriers that were not systematic, or references to the system supporting PD.

Category: Attitudes; Attitude about Literacy				
CODE: Attitudes	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
SoR is popular	This code captures teacher references to the popularity	“Then science of reading really started to come in vogue.”	This code included teacher references to the SoR being	This code excluded teacher referencing other trainings that were

	of the Science of Reading.		popular, including the sentiment that it may be a passing fad.	not explicitly SoR.
SoR Myth	This code captured teacher references to the Science of Reading that were not true.	“So like, I know this is how it worked when I was in high school, get assigned the bulk of the reading we did outside of class, we would annotate and we would come with the list of words that we could not decode using context clues.”	This code included references to SoR that were not true or discussion of SoR that teachers were unsure of or had heard.	This code excluded references to SoR that were true or truths that the teachers were sure of.
SoR is everywhere	This code captures teacher references to the ubiquity of the Science of Reading.	“The Science of Reading obviously has kind of exploded over the last several years. That's all we hear about now.”	This code included teacher perception that SoR was suddenly important and various entities were talking about it.	This code excluded references to trainings that are similar to SoR, such as LETRS.
Literacy is a big issue	This code captured teacher attitudes that literacy is an issue.	“I mean, literacy is a big issue. It's, every time we give, some sort of assessment or diagnostic test, it, it becomes clear that, students struggle with reading.”	This code captured teacher anxiety that literacy is a problem and that it needs to be solved.	This code excluded positive teacher feelings about literacy.
We don't have solutions	This code captured teacher sentiment that neither teachers nor administrators have solutions to issues.	“So it seems like we talked a lot about it. And I don't, I don't know if we, I don't know if we came up with a solution that that had any impact.”	This code included a general doubt about the ability to solve the literacy crisis, including both the teacher and the administration, and was more of a general concern that no one has solutions.	This code excluded teachers discussing their own shortcomings and was about the general system not having solutions.

Literacy is not important	This code captured teacher sentiment that literacy is not as important as other issues.	“So that was that was strange for me. You know, you go from teaching the college level to teaching beginning readers, really.”	This included teachers expressing an attitude that there are other issues and the literacy crisis is not important.	Although similar to the “not my job” codes, this included a specific teacher attitude that literacy is not important.
I don’t know how to teach people to read	This code captured teacher attitude and perception that they are unable to teach people to read.	“I would love more literacy training. We have to do reading interventions but with a 7-12 degree I was never taught how to teach students to read.”	This included teachers explicitly expressing the attitude that they are unsure of how to teach people to read.	This code excludes references to other specific literacy skills and general doubts about teaching.

Category: Attitudes; Attitude about my job				
CODE: Attitudes	Definition	Example Quote	Inclusion Criteria	Exclusion Criteria
Pressure	This code captured teacher attitude that their jobs included a lot of pressure to solve the literacy crisis.	“This does put an inordinate amount of pressure on a secondary educator to teach at extremely diverse levels, and this worries me. Our students are coming to us increasingly unprepared.”	This code included teacher self-perception and internalization that there was pressure on them.	This code did not include outside evidence of pressure or indirect reference to pressure.
Not Reading Teacher	This code captured an expressed teacher attitude that their job is not to teach reading.	“I was an English teacher, not a reading teacher”	This code included perceptions about PD, that they are not trained to be reading teachers and that is because they are not reading teachers.	This code focused on teacher perception and explicit statement that they are not reading teachers. It did not include my evaluation of them taking on tasks that were not reading teacher jobs.
Literacy is not my job	This code captured an expressed teacher attitude that their	“The only thing this district currently offers is LETRS, which is	This code captured teacher attitudes that their job is not to teach	This code excludes other teacher attitudes regarding literacy.

	job is not to teach literacy.	a wonderful PD, but not entirely relevant to the level of English that I teach unless I am specifically helping students at lower reading levels.”	or improve literacy skills.	
Literature is my Job	This code captures teacher attitude that their job is to teach literature.	“I got an extensive literature background”	This code includes teacher attitude about what their job entails, where teachers expressed explicitly that their job is to teach literature.	This code excludes other teacher attitudes about literacy and what their job is.
Needs PD for kids these days	This code captures a teacher attitude that there is a need for specific PD that would support student needs today.	“But after Covid, there was a shift in how these kids are learning words.”	This code includes a sentiment that students today have specific needs and that teachers need PD to support those specific students.	This code excludes other teacher attitudes about different PD needs, as well as different teacher concerns about the literacy crisis.
Efficacy	This code teacher attitude about their ability to perform their job.	“However, you know, I have two children. I taught them how to read.”	This code included teachers feelings of self-efficacy and ability to do their job.	This code excludes feelings about literacy or what a teacher’s job is.

Appendix B - Survey Instrument and Interview Protocol

TSELI Scale (Tschannen-Moran & Johnson, 2011)

Questions	Not confident	Very little confidence	Somewhat confident	Confident	Expert Level Confident
1. I can provide my students with opportunities to apply their prior knowledge to reading tasks.					
2. I can help my students monitor their own use of reading strategies.					
3. I can model effective writing strategies.					
4. I provide students with writing opportunities in response to reading.					
5. I can adjust reading materials to the proper level for individual students.					
6. I have an understanding of how language can be broken into individual sounds and the ability to teach students how to identify, manipulate, and blend these sounds.					
7. I have a deep understanding of letter-sound correspondences and can effectively teach students how to decode words by sounding them out.					
8. I can assess and address different aspects of reading fluency, including accuracy, rate, and expression to ensure students are reading with appropriate pace and understanding.					
9. I can select and explicitly teach specific vocabulary words within a given lesson or unit, considering factors such as students' prior knowledge, text complexity, and the importance of the word to understanding the content.					
10. I understand the complex of process of reading comprehension, including the various strategies can use to extract meaning from the text.					
11. I can effectively teach various reading strategies to students of different levels					

Open Ended Survey Question:

Have you received literacy specific training or professional development? If so, who provided this training and how often did this training occur? If not, would this be beneficial to you?

Interview Protocol

Introduction

Thank you for coming. This interview is being recorded, also we can stop at any time. This is a follow up interview to our research on literacy at the secondary level. I am a graduate student helping support this research. Today's questions focus on your experiences with professional development in the classroom and your experiences with English Language Learners or emergent bilingual students. Our goal is learn more about your experiences in the classroom to help support teachers. We have about an hour today.

PD Questions

Science of Reading

Describe your experiences with Science of Reading, your personal experiences, any professional trainings, and ways it has impacted your classroom, if at all.

Describe Professional Development training you have had on literacy specific topics. Have you been trained on the Science of Reading?

Topic of PD

In what ways do your professional development topics connect to your classroom content? What types of PD topics have you encountered that are disconnected (non-ELA topics).

What connection, if any, do you see between gaps in student knowledge, and the type of PD opportunities you are offered by your school?

Quality of PD

What types of learning activities are used to deliver PD at your school?

What measures do you or the school district take to determine if professional development is effective?

What impact or connection does your teaching context (ie, your school district, your school, access to resources, etc) have on your PD opportunities, as you understand them?

PD Features

Describe your opportunities to collaborate and apply your PD to your classroom learning, if any. To what extent, if any, do your professional development opportunities give you the chance to reflect and receive feedback?

Describe any outside PD opportunities you are involved with. What makes you look outside of the district? If not, why not?

Appendix C - IRB Approval & Consent Form



Office of Research Integrity,
Compliance and Security

TO: Ambyr Rios
Curriculum and Instruction

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 05/22/2025

RE: Proposal #IRB-11346, entitled "Survey of text selection in EC-12 schools."

MODIFICATION OF IRB PROTOCOL #IRB-11346, ENTITLED, "Survey of text selection in EC-12 schools"

EXPIRATION DATE: Exempt

The Committee on Research Involving Human Subjects (IRB) has reviewed and approved the request identified above as a modification of a previously approved protocol. **Please note that the original expiration remains the same.**

All approved IRB protocols are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews may also be performed during the course of this approval period by a member of the University Research Compliance Office staff. Unanticipated adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB, and / or the URCO

It is important that your human subjects activity is consistent with submissions to funding / contract entities. It is your responsibility to initiate notification procedures to any funding / contract entity of any changes in your activity that affects the use of human subjects.

Electronically signed by Lisa Rubin on 05/22/2025 11:25 AM ET

INFORMED CONSENT SCRIPT

Title of Research Study: Texts for Teaching in EC-12 schools

Investigator: Dr. Ambyr Rios

Why am I being asked to take part in this research study?

This survey aims to collect information on two key areas relevant to middle and high school ELA teachers: their training and experiences with text selection and literacy strategies and their approach to curriculum development, support, and implementation in secondary ELA classrooms. You were selected as a possible participant in this study because you are a current 6-12th grade ELA teacher in Kansas. You must be 18 years of age or older to participate.

Why is this research being done?

The survey is designed to learn about secondary ELA teachers' experiences with text selection, literacy, and curriculum in Kansas classrooms. Specifically, we want to see how higher education institutions can support future and current classroom teachers in literacy and curriculum development by providing needed resources, instructional support, and training.

How long will the research last?

It will take about 45 to 60 minutes to complete the survey. Should you choose to participate in the optional interview, this would take an additional 45-60 minutes.

What happens if I say “Yes, I want to be in this research”?

If you decide to participate, you will complete a survey to the best of your ability. This will include both drop-down and open response questions.

What happens if I do not want to be in this research?

Your participation in this study is voluntary. You can decide not to participate in this research and it will not be held against you. You can leave the study at any time.

Will I be compensated for this research?

If you choose to participate in this research, you are eligible to earn \$50 for your robust survey completion. To complete the necessary paperwork to receive \$50, you can follow the hyperlink on the completion page to enter your contact information and upload the required W-9 form. Otherwise, no identifiable information will be collected from you during the initial survey.

Is there any way being in this study could harm me?

There are no sensitive questions in this survey that should cause discomfort. However, you can skip any question you do not wish to answer, or exit the survey at any point.

What happens to the information collected for the research?

You may view the survey host's confidentiality policy at: <https://www.qualtrics.com/privacy-statement/>. Your contact information will not be collected on the initial survey. Should you wish to provide your contact information to be compensated \$50 for your time, your contact information will be stored separately from your survey data. All information will be kept on a

password protected computer and is only accessible by the research team. The results of the research study may be published but no one will be able to identify you.

Who can I talk to?

Please feel free to ask questions regarding this study. You may contact Dr. Ambyr Rios (512.917.0782; ambyrrios@ksu.edu) if you have additional questions or concerns.

You may also contact the Kansas State Institutional Review Board (which is a group of people who review the research to protect your rights) by phone at 785.532.3224, or by email at comply@k-state.edu

Appendix D - TSELI Reliability Analysis

Methodology

To test for Cronbach's Alpha, I first ensured all of the items were going in the same direction on the survey, and they were all positively worded. I then divided the survey items into their two categories: the broader literacy category and the 5 pillars category. I ran a reliability analysis in SPSS. I ran two tests, one for each of the categories. I selected descriptives: item, scale, scale if item deleted; summaries: means, correlations; inter-item: correlations; ANOVA Table: none. Please see the results below.

Scale: Broader Literacy Category

Case Processing Summary

		N	%
Cases	Valid	153	77.3
	Excluded ^a	45	22.7
	Total	198	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.794	.800	6

Inter-Item Correlation Matrix

	I can provide students opportunities to apply knowledge to reading.	I can help students monitor reading strategies.	I can model effective writing strategies.	I provide students writing opportunities in response to reading.	I adjust reading materials for individual students.	I can teach reading strategies to students of different levels
I can provide students opportunities to apply knowledge to reading.	1.000	.559	.392	.319	.484	.414

I can help students monitor reading strategies.	.559	1.000	.296	.328	.498	.537
I can model effective writing strategies.	.392	.296	1.000	.656	.327	.228
I provide students writing opportunities in response to reading.	.319	.328	.656	1.000	.181	.168
I adjust reading materials for individual students.	.484	.498	.327	.181	1.000	.620
I can teach reading strategies to students of different levels	.414	.537	.228	.168	.620	1.000

Scale: 5 Pillars Category

Case Processing Summary

		N	%
Cases	Valid	159	80.3
	Excluded ^a	39	19.7
	Total	198	100.0

- a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.887	.889	

Inter-Item Correlation Matrix

	I understand of how to teach students how to identify, manipulate, and blend individual sounds.	I understand letter-sound correspondences and can teach students to decode.	I can assess reading fluency, including accuracy, rate, and expression.	I can select and explicitly teach specific vocabulary words.	I understand the process of reading comprehension, including strategies.
I understand of how to teach students how to identify, manipulate, and blend individual sounds.	1.000	.872	.709	.488	.594
I understand letter-sound correspondences and can teach students to decode.	.872	1.000	.790	.468	.588
I can assess reading fluency, including accuracy, rate, and expression.	.709	.790	1.000	.447	.568
I can select and explicitly teach specific vocabulary words.	.488	.468	.447	1.000	.632
I understand the process of reading comprehension, including strategies.	.594	.588	.568	.632	1.000

Appendix E - TSELI Confirmatory Factor Analysis

Methodology: For the Confirmatory Factor Analysis, I ran the Kaiser M O Barlett's test of sampling adequacy. In SPSS, I selected for descriptives: Coefficients and KMO and Bartlett's test of sphericity in the Correlation matrix; extraction: correlation matrix, Scree plot, and to extract based on eigenvalues greater than 1. I used a promax rotation for the Confirmatory factor analysis. I displayed the rotated solution. Please see the results below.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.847
Bartlett's Test of Sphericity	Approx. Chi-Square	995.169
	df	55
	Sig.	<.001

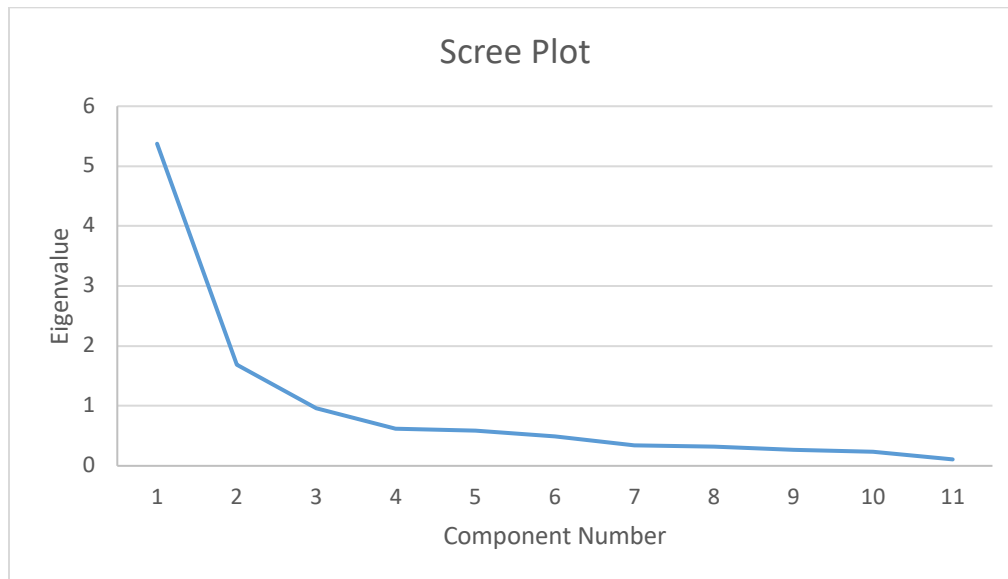
Correlation matrix

	I can provide students opportunities to apply knowledge to reading.	I can help students monitor reading strategies.	I can model effective writing strategies.	I provide students writing opportunities in response to reading.	I adjust reading materials for individual students.	I understand of how to teach students how to identify, manipulate, and blend individual sounds.	I understand letter-sound correspondences and can teach students to decode.	I can assess reading fluency, including accuracy, rate, and expression.	I can select and explicitly teach specific vocabulary words.	I understand the process of reading comprehension, including strategies.	I can teach reading strategies to students of different levels
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I can provide students opportunities to apply knowledge to reading.	1.000	.559	.392	.319	.484	.340	.311	.274	.492	.473	.414
I can help students monitor reading strategies.	.559	1.000	.296	.328	.498	.403	.390	.428	.390	.590	.537
I can model effective writing strategies.	.392	.296	1.000	.656	.327	.166	.129	.176	.328	.345	.228
I provide students writing opportunities in response to reading.	.319	.328	.656	1.000	.181	.141	.105	.105	.291	.308	.168
I adjust reading materials for individual students.	.484	.498	.327	.181	1.000	.390	.392	.468	.512	.539	.620

I understand of how to teach students how to identify, manipulate, and blend individual sounds.	.340	.403	.166	.141	.390	1.000	.867	.715	.509	.579	.444
I understand letter-sound correspondences and can teach students to decode.	.311	.390	.129	.105	.392	.867	1.000	.801	.479	.566	.510
I can assess reading fluency, including accuracy, rate, and expression.	.274	.428	.176	.105	.468	.715	.801	1.000	.472	.574	.523
I can select and explicitly teach specific vocabulary words.	.492	.390	.328	.291	.512	.509	.479	.472	1.000	.647	.495

I understand the process of reading comprehension, including strategies.	.473	.590	.345	.308	.539	.579	.566	.574	.647	1.000	.638
I can teach reading strategies to students of different levels	.414	.537	.228	.168	.620	.444	.510	.523	.495	.638	1.000



Pattern Matrix^a

	Component 1	2
I can provide students opportunities to apply knowledge to reading.	.263	.574
I can help students monitor reading strategies.	.436	.426
I can model effective writing strategies.	-.158	.886
I provide students writing opportunities in response to reading.	-.222	.882
I adjust reading materials for individual students.	.520	.322
I understand of how to teach students how to identify, manipulate, and blend individual sounds.	.923	-.172
I understand letter-sound correspondences and can teach students to decode.	.979	-.242
I can assess reading fluency, including accuracy, rate, and expression.	.927	-.178

I can select and explicitly teach specific vocabulary words.	.553	.315
I understand the process of reading comprehension, including strategies.	.668	.292
I can teach reading strategies to students of different levels	.663	.176

Extraction Method: Principal Component Analysis.

Rotation Method: Promax without Kaiser Normalization.

a. Rotation converged in 3 iterations.