

JOB-EMBEDDED TEACHERS' PERSPECTIVES ON PROFESSIONAL LEARNING:

A CASE STUDY OF JOB-EMBEDDED SECONDARY TEACHERS
AND THEIR EDUCATION LEADERS IN A LOCAL TENNESSEE SCHOOL DISTRICT

A Capstone Project

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by

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Abstract

This exploratory case study of six secondary schools in a southeastern United States' school district examined the perspectives of job-embedded teachers and their education leaders on professional learning for implementing instructional practices. Job-embedded teachers, who start as teachers-of-record while pursuing an educator preparation program, face challenges due to a lack of instructional knowledge despite immediate classroom responsibilities. Effective professional learning should be continuous, collaborative, and supported by leadership, and may be integrated into mentoring or induction programs (Darling-Hammond et al., 2017; Garet et al., 2001). This study investigated how job-embedded teachers in their first three years of teaching and their education leaders, including district leaders and principals, viewed professional learning to implement instructional practices. Data were collected through semi-structured interviews with 12 participants and the analysis of seven documents. Findings indicated that while both groups desired more professional learning, they had differing views on its sources, and education leaders sought increased knowledge of and communication about job-embedded educator preparation programs based within the local institute of higher education. These results inform recommendations that address district-wide structures such as instructional coaching and formalized systems such as a district leader liaison.

Keywords: job-embedded teacher, instructional practices, non-traditional pathway to teaching, alternative route to teaching, professional learning

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Approval

This study, "Job-Embedded Teachers' Perspectives on Professional Learning: A Case Study of Job-Embedded Secondary Teachers in a Local Tennessee School District," has been approved by the Graduate Faculty of the School of Education and Human Development in partial fulfillment of the requirements for the degree of Doctor of Education.

Dr. Anne Jewett, Chair

Dr. Jen Pease

Dr. Sharon Roberts

Dedication

To my children, Audrey and Tommy.

As I am achieving this dream, you are on the brink of pursuing your own. I believe in you.

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Chapter 1: Introduction

Statement of the Problem

Education in grades K-12 has been facing a challenging teacher shortage with estimates ranging between 36,000 to 52,000 vacant teaching positions across the United States (Nguyen et al., 2022). Other estimates suggest that the supply and demand gap is over 100,000 teaching positions, elevating the issue even further (García & Weiss, 2019). Challenges exist to enumerating the specific shortage areas due to a lack of a centralized, national database to publish this information (Bleiberg & Kraft, 2022). While shortages vary across individual states and content areas, the trends appear to portray an overarching issue: fewer teachers are available in the workforce than needed to meet student enrollment levels (García & Weiss, 2019; Ingersoll, 2001; Nguyen et al., 2022). According to the Bureau of Labor Statistics (2023), teacher turnover rates match those of other professions. Thus, the perceived teacher shortage issue may be more closely linked to student enrollment increases or the natural progression of teacher retirement rather than disinterest in the teaching profession itself. However, annually, many schools do not operate with a full teaching staff, so there is a gap between the number of teachers needed and those available or willing to work (National Center for Education Statistics, 2022).

To address this shortage, states and school districts are developing ways to increase the teacher supply, such as non-traditional licensure pathways that provide individuals with teaching certification coursework outside of a traditional undergraduate 4-year degree; however, research suggests that teacher satisfaction, interest, and status have dropped to the lowest levels seen in 50 years (Kraft & Lyon, 2022). So, despite the efforts of non-traditional pathways to teaching, there still are apparent teacher pipeline problems; these pipeline problems stem from broader problems within the teaching profession, such as the potential decrease in individuals interested in pursuing teaching as a career compared to the past (Kraft & Lyon, 2022).

Non-traditional educator preparation programs have become particularly strong as a result of the Every Student Succeeds Act (ESSA) in which states submitted plans to the U.S. Department of Education to provide equal access to learning and reduce gaps in student outcomes (American Institutes for Research, 2017). One type of non-traditional educator preparation program is a job-embedded program in which teaching candidates take coursework while employed as a teacher of record in a school with full responsibility for student learning (Tooley, 2023). While these programs aim to increase the teacher pipeline, non-traditional programs typically do not provide candidates with the same, or any, pedagogical training before teaching placement (Walsh & Jacobs, 2007). Specifically, the Learning Policy Institute (2016) found that teachers who did not receive pedagogy training, which are often non-traditional pathway teachers, were two and a half times more likely to leave the profession after one year as compared to teachers who did receive pedagogy training. This means that while non-traditional pathways have grown through policies such as ESSA, the solution of non-traditional teaching pathways may not solve the long-term teacher retention problem. Couple this issue with research showing that teacher turnover has a strong negative impact on student achievement and school improvement, and the teacher shortage issue becomes even more layered (Podolsky et al., 2016). Developing teachers through non-traditional programs, while innovative, may not solve the teacher shortage issue as intended.

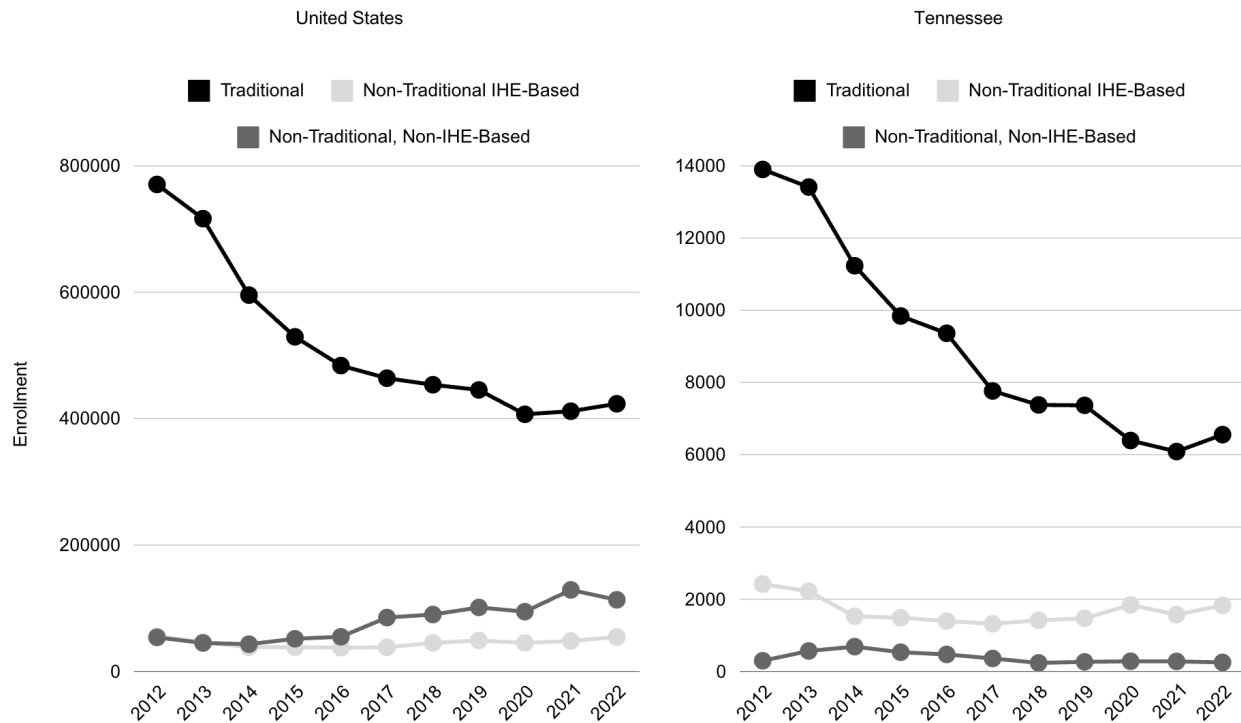
One type of non-traditional program that has grown are job-embedded programs. These job-embedded programs allow teachers to be a teacher of record while completing educator preparation (EPP) coursework (Tennessee Department of Education, 2023c). There are two types of job-embedded programs outside of the traditional EPP: 1) those that are tied to an institution of higher education (IHE-based) and 2) those that are not tied to an institution of higher education (non-IHE-based) (Tooley, 2023; U.S. Department of Education, 2023). Non-IHE-based EPPs are often tied to school districts or the state Department of Education (Tooley, 2023; U.S. Department of Education, 2023). These two types of programs may not contain the

same coursework, timeline, or sequence of learning, which also creates a variety of teacher preparation experiences (Tooley, 2023). Definitions of these programs and other relevant terms can be found at the end of Chapter 1.

Despite these two pathways, fewer teacher candidates are enrolling and completing traditional and non-traditional EPPs than ten years ago (Saenz-Armstrong, 2023). For example, the United States EPP enrollment in 2022 is 70% of what it was in 2012, and any increases observed in this time seem to correlate to the rise of job-embedded EPPs (Saenz-Armstrong, 2023). Essentially, we are seeing a downward trend in EPP enrollment, and when there are increases, those may be attributed to job-embedded EPP enrollments - either IHE or non-IHE-based. This trend is summarized in Figure 1.1.

Figure 1.1

EPP Enrollment by Route by Title II Report Year in the United States and Tennessee



Note. The figure is based on data from (Saenz-Armstrong, 2023).

Given this potentially promising increase in job-embedded programs, it is important to understand the diverse backgrounds of these new teachers. Research has centered on the needs of new teachers from both traditional and job-embedded pathways (Darling-Hammond, 2010; Darling-Hammond & Baratz-Snowden, 2007). Generally, teachers need to develop pedagogical practices, utilize feedback, learn from modeling, and experience a gradual release of classroom responsibility. However, job-embedded teachers may not have those explicit learning opportunities since they are placed in a teacher of record role rather than internships with a mentor teacher in the classroom (Darling-Hammond, 2010; Darling-Hammond & Baratz-Snowden, 2007). Furthermore, Darling-Hammond and Baratz-Snowden (2007) suggest that the most successful job-embedded EPPs have these pedagogical skills of modeling, feedback, and gradual release built into their curriculum. Thus, it is critical to understand what and how teachers are learning within non-traditional EPPs so schools can support them in their job-embedded placements.

Aside from the diverse needs of non-traditional EPP pathway job-embedded teachers, these teachers also bring diverse backgrounds and experiences to the classroom (Darling-Hammond, 2010; Darling-Hammond & Baratz-Snowden, 2007). Some job-embedded teachers have had classroom roles such as a teaching assistant or substitute, and others may have had industry-based experiences that are relevant to their teaching role (e.g. an accountant who enters an alternative licensure pathway to be a business teacher) (Darling-Hammond, 2010). This poses a challenge to schools: schools need to meet the needs of the unique job-embedded teacher cohort from a new-to-teaching and industry-experience perspective, and those needs can become focal points for school or district professional learning (Darling-Hammond & Baratz-Snowden, 2007). While key features of effective professional learning are known, adapting these to the job-embedded teacher is worth exploring to meet their specific needs (Darling-Hammond et al., 2017).

All teachers can benefit from participating in high-quality professional learning (Darling-Hammond et al., 2017). However, there may be an increased need for professional learning experiences since approximately 17.1% of the teacher workforce is entering from a non-traditional licensure pathway with less pedagogy coursework (García & Weiss, 2019). Essential characteristics of professional learning are designed to improve instruction and subsequent student achievement, and those professional learning experiences can be a singular or series of learning events that change teacher practices (Darling-Hammond et al., 2017). Professional learning that includes key components of collaboration, modeling, feedback, sustained duration, and reflection can positively impact student learning outcomes (Darling-Hammond et al., 2017).

Implementing professional learning also has its challenges. Research suggests that professional learning is key for teachers to advance instructional practice, but embedding recurring professional learning in a school day, such as during a planning period or student half day, can be challenging for school leadership to facilitate (Daniels, 2016; Dogan & Adams, 2018; Tam, 2015). Yet, embedded professional learning can positively impact student outcomes by increasing the likelihood of teacher collaboration and the use of effective instructional strategies (Darling-Hammond et al., 2017; Dogan & Adams, 2018, 2020; Doppelt et al., 2009; Tam, 2015). Another challenge is providing immediate and relevant professional learning to job-embedded teachers with varied backgrounds because they have different needs, experiences, and may be participating in different job-embedded EPPs (Darling-Hammond & Baratz-Snowden, 2007). Furthermore, developing a shared vision between education leaders and diverse teaching faculty may better create plans that are aligned with the school organization's needs and thus the individual (Kouzes & Posner, 2019, p. 835). So, schools are tasked with continuous professional learning for experienced and inexperienced teachers, including those from traditional and job-embedded pathways, to yield effective instruction and ultimately student learning.

A school's vision, collaboration, and professional learning plan can be implemented through a structure termed a professional learning model (PLM). While PLMs focus on professional learning components, theory of learning, methods, scale, and teacher agency, small scale professional learning begins with the individual student, teacher, and professional learning community (PLC) (Boylan et al., 2018; DuFour, 2004). The PLC model is a structure in which teachers of the same grade and subject collaborate on student learning using outcome-based approaches (DuFour, 2004). Historically, researchers such as Glickman (1980) focused on investigating how supervisory roles (e.g. school administrator) change teacher practices, but more recent researchers, such as Guskey (2002, 2021), identify teacher change as motivated by student outcomes. Thus, teachers are motivated to change practice by their initiative rather than a supervisory directive from school or district leadership (Powell & Bodur, 2019). The professional learning landscape has shifted to an internal change rooted in teacher motivation and beliefs (Desimone, 2009; Powell & Bodur, 2019).

Concurrently, job-embedded teachers are participants in PLCs with limited, if any, background in the methods of effective PLC collaboration, routines, and structure (Bowling & Ball, 2018). Job-embedded teachers may work collaboratively or independently to develop instruction and respond to student learning needs, but they may lack a consistent and comprehensive understanding of the PLC function, pedagogy, and procedures (Bowling & Ball, 2018). This can yield underwhelming student learning outcomes and possibly impact teacher satisfaction (Bowling & Ball, 2018; Munoz & Branham, 2016). One example of this gap can be found in the Tennessee Educator Survey, an annual survey of teachers and administrators across the state. Specifically, in the Tennessee Educator Survey including 37,056 teachers from across the state, the majority of teachers responded that their EPP prepared them to implement major teaching competencies, including 89% of teachers stating their EPP taught them to “engage in ongoing professional learning” (Tennessee Department of Education, 2023a). While this statistic may be promising, the survey does not disaggregate the responses between

traditional and job-embedded teachers. This creates potential uncertainty about the actual perspectives of job-embedded teachers; it is difficult to discern how prepared job-embedded teachers feel and what their possible needs are when starting in the profession without those participants disaggregated in the data report.

To assist new teachers' inclusion to the school and profession, some schools or districts may develop teacher mentoring or induction programs at the direction of the school district. Mentoring and induction programs may include job-embedded teacher candidates as participants. In both approaches, either mentoring or induction programs, implementing a comprehensive, multifaceted program yields the best results for student learning, teacher satisfaction, and teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Keese et al., 2023). Given these findings, merging professional learning with the needs of newly hired job-embedded teachers through mentoring and induction may benefit student learning outcomes.

Despite the benefits of professional learning, the literature predominantly centers on PLCs for experienced teachers, rather than addressing the specific needs of job-embedded teachers in PLCs or broader professional learning models at the school or district level. While teachers can apply their professional learning experiences in their classrooms, ensuring alignment with the school's local context is complex. Yet, scalable change through professional learning from the organization to classroom level requires knowledge of the "lived organization" of a school or grade level PLC and the needs of individual, diverse teachers (Wenger-Trayner, 2008, p. 241). In other words, these complex interactions necessitate that professional learning is based on the district's organizational needs yet aligned to the school procedures, teachers, and students. At the same time, job-embedded teachers receiving this professional learning are participating in different EPPs - IHE-based and non-IHE-based - which complicates determining the types of professional learning needed to help them implement instructional practices. This juxtaposition of varied micro-scale teacher professional learning needs within the macro-level

district organization reveals a gap in the literature to address the job-embedded teacher professional needs.

Problem of Practice

Tennessee is also experiencing a teacher shortage across multiple certifications and grade levels across all disciplines, including English, mathematics science, social studies, special education, and world languages (U.S. Department of Education, 2024). This may be part of a larger U.S. labor shortage with the labor force participation rate at 62.7% (U.S. Chamber of Commerce, 2024). However, the U.S. Department of Education does not break down the teacher shortages across geographic regions of Tennessee, making it challenging to identify localized areas of increased teacher shortage. Furthermore, there is limited state reporting of teacher shortages based on geographic and teacher certifications across the United States (Saenz-Armstrong, 2021). Even more challenging is that Tennessee does not publish vacancies, nor does it publish the disaggregated data between teacher supply and demand; thus, the U.S. Department of Education's Teacher Shortage Report is the most useful to understand this statewide problem (Saenz-Armstrong, 2021; U.S. Department of Education, 2024).

Concurrent to national and state employment trends, local Tennessee school districts have specific shortages in special education and pre-K certifications. This may be partially due to the increased requirements for these certifications, which creates less licensure flexibility. These candidate pools continue to be the smallest with certified applicants and have the most openings to fill. These shortages have also developed over a period of time in which the geographic area of this study has experienced an approximate 24% increase in education and healthcare workers in the last ten years (U.S. Bureau of Labor Statistics, 2024). So, the field is growing, but not fast enough to fill these positions.

In response to the national teacher shortage and local Tennessee teacher shortage, Tennessee has developed non-traditional EPPs such as alternative routes to certification, Grow

Your Own, and job-embedded programs. Alternative routes to certification provide a different series of courses to traditional licensure, and Grow Your Own programs develop high school students into teaching professionals through IHE partnerships (Boyd et al., 2007; Gist, 2019). These different programs are also aimed to increase the teacher pipeline and support the teacher shortage in all content areas.

Specifically, this study explores two job-embedded EPPs, one IHE-based and one district-based, that Tennessee created for teacher candidates who hold a bachelor's degree in an area outside of education (Tennessee Department of Education, 2023c). Job-embedded EPPs provide an experience for new teacher candidates to be employed as a teacher of record while completing EPP coursework (Tennessee Department of Education, 2023c). This initiative is intended to address the teacher shortage and reduce barriers to teaching by providing teacher candidates a wage while earning their license (Tennessee Department of Education, 2023c). However, similar to traditional pathway teachers, job-embedded teachers need continuous professional learning, yet job-embedded teachers come from a variety of backgrounds (Darling-Hammond, 2010; Darling-Hammond & Baratz-Snowden, 2007). While research has identified features of effective professional learning, the idea of a professional learning model and corresponding professional learning experiences for this specific job-embedded cohort of teachers to implement instructional practices has yet to be determined (Darling-Hammond et al., 2017).

Implementing instructional practices is central teaching and learning. Teachers utilize instructional practices by responding to learner needs while also developing a learner's skill and conceptual knowledge (Pashler et al., 2007). Furthermore, research in cognitive science, instructional practices, and student learning have identified specific and effective instructional practices (Sherrington, 2019). Specifically, Rosenshine (2012) identified ten effective instructional practices such as presenting material in small steps, questioning for understanding, providing worked examples, and using checks for understanding within a lesson. In one

example of these instructional practices, worked examples provides students with models that they can use for independent practice and problem solving. In another example, presenting material in small steps recognizes that students' working memory is limited, and thus presenting smaller segments of material helps students to practice their new learning while not becoming overwhelmed (Rosenshine, 2012). Furthermore, Rosenshine's (2012) instructional practices also aligned with the practices identified by Pashler et al. (2007), meaning that multiple research sources have identified the same instructional practices. Thus, these instructional practices should be leveraged by teachers to effectively implement instruction. This study explored instructional practices professional learning of job-embedded teachers.

Pooley County Schools¹ is a large school district in Tennessee that serves over 60,000 students across 94 schools with a diverse student population. Since the district is large, the superintendent created regions based on similar community characteristics to improve resource allocation and respond to school needs. Specifically, Region A serves 17 schools including three high schools, three middle schools, and 11 elementary schools. These schools are feeder schools, meaning that most students progress together to the next school in sequence. Each school in Region A and the district's other regions creates a school-specific professional learning plan aligned with the district's key priorities² and the school's improvement plan. Of particular interest to this study, one of the district's key priorities is focused on having high quality teachers to ensure success for all students. Yet, the region and district do not provide a PLM, a structure that provides professional learning components, theory of learning, methods, scale, and teacher agency, as guidance to develop these plans nor are schools required to differentiate professional learning for teachers from different licensure pathways (Boylan et al., 2018). Thus, schools are tasked to create meaningful professional learning activities for their

¹ All organization, region, and individual names in this capstone are pseudonyms to maintain confidentiality.

² Information from the school district's key priorities document is not cited to preserve the anonymity of the organization.

diverse teaching faculty that advance instructional practices and impact student achievement, yet a shared PLM vision for job-embedded teachers and all faculty is lacking (Kouzes & Posner, 2019). The lack of a PLM can lead to ineffective professional learning and hinder organizational change, ultimately affecting instruction and student achievement because leadership and collaboration have been revealed as necessary for professional learning (Darling-Hammond et al., 2017; DuFour, 2004; Kouzes & Posner, 2019).

Murch Point Middle School is one of three middle schools within the district, and I am an administrator at the school. Part of my role is to support all new faculty, from both traditional and job-embedded pathways, in one of the middle schools within Region A as the leader of school professional learning. Within that role, one of my responsibilities is to lead the school's new teacher induction program. Currently, the school induction program and overall professional learning plan do not align with a specific PLM and have not identified the specific professional learning needs perceived by job-embedded teachers or their local education leaders. The induction program provides policy, procedure, and instructional professional learning; however, job-embedded teachers report that they have additional needs outside of the school offerings and their EPP program offerings. For example, one teacher reported that she did not receive instruction on addressing the needs of special education students through instructional strategies prior to her teaching assignment; nor has she completed a specific special education course in her first year of teaching as a job-embedded teacher. In another example, a job-embedded teacher stated that she needed help implementing instructional strategies to teach math students with learning disabilities while using the district curriculum. These self-reported needs have come from classroom observations, teacher conferences, and anecdotal evidence. Most job-embedded teachers within the region have started in the last two years, and thus, there is a lack of data and reporting available to frame the problem of practice beyond the evidence described. Also, in conversation about this issue, district leadership identified that they have not yet considered the next steps of professional learning for job-embedded teachers nor

the contrasting perspectives between job-embedded teachers and their education leaders. Specifically, leadership shared that job-embedded candidates hired midyear do not necessarily enter an EPP at the point of hire; rather, they must often wait until the following August to begin their EPP concurrent with a new school year. This means that midyear job-embedded hires are not receiving any EPP coursework until the following school year. These situations create a problem of practice that is critical to explore and understand to assist job-embedded teachers' instructional practice.

Thus, this problem of practice is new and evolving. This problem of practice focuses on the perspectives of professional learning needs of these job-embedded teachers and their education leaders to understand their similarities and differences between their perspectives and explore possible recommendations. Understanding these perspectives is a problem of practice worth addressing to meet the needs of job-embedded teachers to improve student achievement, school improvement, and teacher retention.

Purpose of the Study

The purpose of this study is to understand how job-embedded teachers and their local education leaders perceive the job-embedded professional learning experiences provided by the school or district. Local education leaders include the district leaders and school principals directly connected to professional learning experiences at the school. Each school has new teacher mentoring or induction programs, and the district has new teacher onboarding programs; however, the consistency, similarities, and differences between these onboarding initiatives are unknown. Specifically, this study will examine secondary schools in Region A schools since they have shared demographics and locations. Also, this study focuses on secondary schools, including middle and high schools, and their job-embedded teachers because most teacher certifications are grade band specific to elementary and secondary. The evidence for this problem of practice has been gathered from a secondary perspective. So,

understanding the perspectives of Region A job-embedded secondary teachers and education leaders may help develop a manageable solution for expansion to other regions.

Given this purpose, I have designed a qualitative study to understand the perspectives of job-embedded secondary teachers and their education leaders in Region A. I intend to compare the perspectives of these participant groups to find areas of similarity and difference. This paper explores the qualitative study using interviews and documents of job-embedded secondary teachers and education leaders in Region A of Pooley County Schools to answer the following questions:

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?
- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

Theoretical Framework

This study explores the perspectives of job-embedded teachers and their education leaders of professional learning experiences in Region A secondary schools of Pooley County Schools. I will use the term 'secondary' to refer to the middle and high schools throughout this paper. Middle schools include grades six through eight, and high schools include grades nine through twelve. From a broader perspective, professional learning is more effective when specific criteria are met: teacher agency, feedback, reflection, collaboration, and sustained duration (Darling-Hammond et al., 2017; Desimone, 2009; Doppelt et al., 2009; Garet et al., 2001; Roth et al., 2011; Scher & O'Reilly, 2009). Implementing these criteria in an organized, aligned manner may be challenging, and thus, a PLM may create a framework in which to situate a change-process-oriented professional learning experience for job-embedded teachers (Boylan et al., 2018; Kennedy, 2014). So, it would be helpful to align this study with Opfer and

Pedder's (2011) complexity theory professional learning model to understand how teacher change occurs within multiple systems.

Opfer and Pedder (2011) developed the complexity theory professional learning model to address the concern that most professional learning models did not account for the systems in which teachers acted, including schools, districts, and the greater education learning system. Teacher professional learning is not an independent act, but rather, part of multiple influences on the teacher that are constantly interacting, confirming, and conflicting with each other (Opfer & Pedder, 2011). Furthermore, this model identifies that there are teaching components that are "contextualized" or specific to the school or district; however, the model also identifies that there are other teaching components that are "decontextualized" or generalizable to the broader education system (Opfer & Pedder, 2011, p. 381). Since job-embedded teachers bring content-specific knowledge and a variety of experiences, they are approaching professional learning within multiple systems and contexts. In order for job-embedded teachers to implement instructional practices, this theory suggests that understanding the interaction of multiple systems - the school, district, teacher content knowledge and experience, and EPP - are critical to teacher change (Opfer & Pedder, 2011).

Additionally, the core of the complexity theory professional learning model is a foundation of andragogy. Andragogy, as developed by Malcolm Knowles, was influenced by earlier theorists who explored the broad context of adult learning, the different needs of adult learners as compared to children, and the increased self-awareness in adult learners (Irby, 2013). Irby summarizes that Knowles' key features of andragogy include the following: adults have responsibility in their learning, adults need to understand concerns and problems that directly impact their life, adults want to engage in problem-solving with a facilitator while maintaining a self-directed learning, and adults have differences in individuals as they age due to life experiences (Irby, 2013). By incorporating these principles into the complexity theory professional learning model, teacher professional learning recognizes how adults learn and also

identifies how professional learning is part of the broader system that is influenced by individual teacher background, experience, and knowledge.

Rationale

Opfer and Pedder's (2011) complexity theory professional learning model fits this study as a theoretical framework for a few reasons. First, job-embedded teachers come from a variety of backgrounds and work experiences. Some job-embedded teachers are completing their EPP immediately post-baccalaureate, and thus, have little-to-no work experience; however, others have years of work experience aligned to their content area or in another industry. Furthermore, each of these new job-embedded teachers are working in different nested systems including schools, grade levels, and subject areas, which all influence teacher instructional practice (Opfer & Pedder, 2011). Job-embedded teachers need to actively participate in the learning process with a facilitator; this facilitator can help address teachers' areas of concern to create an environment in which the learning goals are co-created between facilitator and teacher (Irby, 2013; Opfer & Pedder, 2011). This interaction of teacher agency and the complex systems in which job-embedded teachers work makes the complexity theory professional learning model a well-aligned, published theory to inform this study as a theoretical framework (Opfer & Pedder, 2011).

The theoretical framework of the complexity theory professional learning model also fits my positionality as a practitioner-researcher. I serve as an administrator in one of the Region A middle schools, and I oversee the school's new teacher induction program. This program serves the school's new and experienced teachers and is designed to be responsive to new teachers' diverse needs. I also collaborate with the other Region A principals, especially those in middle schools, to implement change processes, and these often include teacher professional learning for those initiatives. Lastly, I develop the annual school professional learning plan for all school faculty for my specific middle school, yet it is aligned with district and regional goals. Thus, my

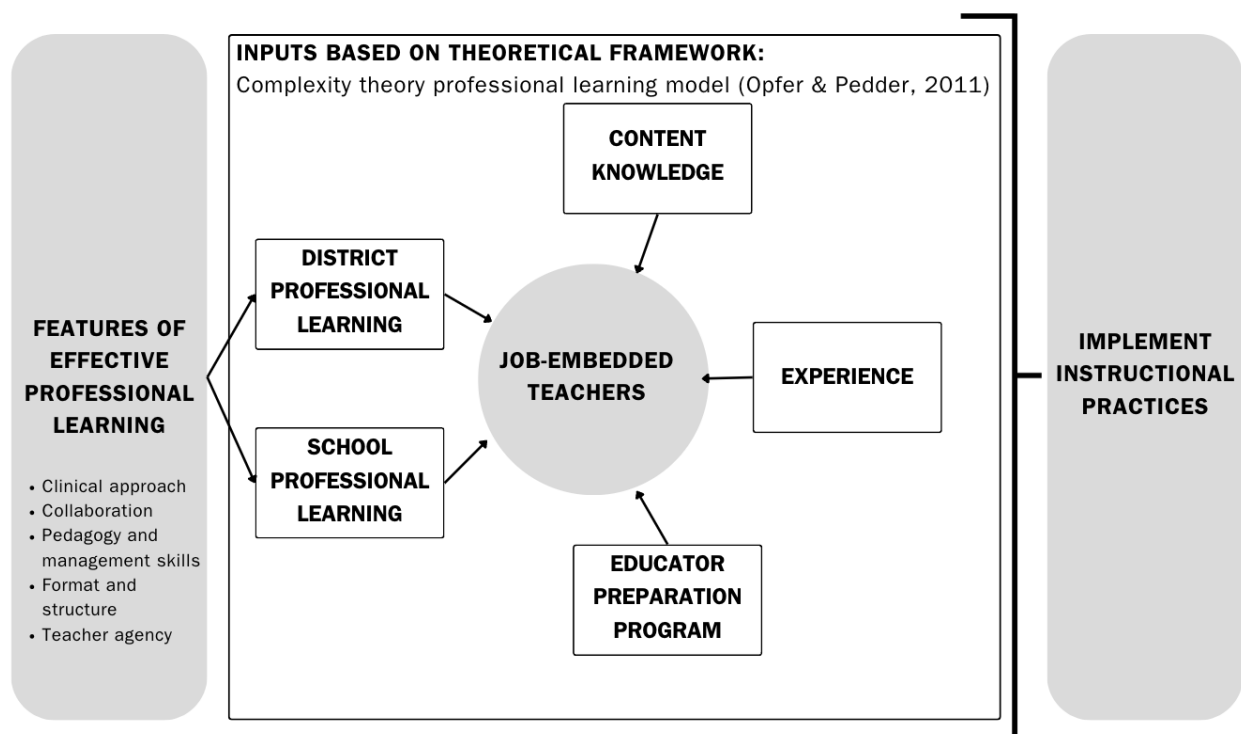
positionality as an administrator and professional learning developer necessitates that I understand the complexity theory professional learning model and its key characteristics.

Conceptual Framework

In addition to using the complexity theory professional learning model as a theoretical framework to inform the research, I developed a conceptual framework to orient my thinking around this problem of practice and reflect published theories, tacit theories, and my personal and professional positionality that influence this study. Since Pooley County Schools' professional learning experiences for job-embedded teachers are more complex than just the complexity theory professional learning model, I developed this conceptual framework in Figure 1.2.

Figure 1.2

Conceptual Framework Informed by Theoretical Framework and Literature



I developed this conceptual framework with an understanding of my research paradigm, interpretivism, to provide insight for my research questions, methodology, and methods

selection. I will also now explain how I used the literature and my positionality to create this conceptual framework.

Interpretivism

The research paradigm for this study is best described as interpretivism because it values the subjective nature of qualitative research, welcomes the influence of the researcher as an integral part of the context, and that the context itself is critical to understanding the problem of practice (Farrow et al., 2020). Furthermore, from this constructivist epistemology and ontology, the interpretivist paradigm recognizes that knowledge is constructed through social experiences and through qualitative methods to learn more about the world (Farrow et al., 2020).

As an administrator at one of the middle schools within Region A of Pooley County Schools, I would like to understand the experiences and perspectives of job-embedded secondary teachers and professional learning. Furthermore, comparing those job-embedded teachers' perspectives with those of their education leaders can help me to better understand the social context of professional learning and the “subjective experiences” within the Region A secondary school environments (Farrow et al., 2020, p. 17).

Types of Teacher Learning Experiences

Teachers participate in two types of experiences: professional development and professional learning, but these terms are not always defined or consistently used within the literature (Boylan et al., 2018). Historically, professional development is organized as content delivery; teachers are presented with material by an authority, and they are tasked with implementing their learning (Webster-Wright, 2009). These one-time sessions take on more of a training model with a focus on policy and procedure rather than content that fosters instructional practice change over time (Webster-Wright, 2009).

Professional development research explores professional learning that is ongoing, embedded, and reflexive with the teachers connecting the learning to their context (Darling-

Hammond & McLaughlin, 2011). As a result, professional learning experiences for teachers tend to be ongoing and continuous with a focus on pedagogical content knowledge, curriculum understanding, instructional strategies, and assessment techniques while engaging in discussion and reflection to generate teacher change in practice and thus improved student learning (Darling-Hammond et al., 2017; Webster-Wright, 2009). Thus, professional learning helps teachers solve problems in context through learning, reflection, and feedback.

Based on these differences, I purposefully focused on professional learning rather than professional development in my conceptual framework because the two serve different purposes. This study will focus on the professional learning experiences that include active learning by teacher participants in partnership with a facilitator that is embedded in real-life experiences and applied to practice. Professional learning elevates “reflective practice, critical evaluation, and continuing learning,” which is directly aligned with my theoretical framework (O’Brien & Jones, 2014, p. 684). While there is merit in professional development in learning one-time content, such as understanding a new board policy or learning school evacuation procedures, this study is concerned with how new job-embedded teachers experience professional learning that impacts their teaching practice.

Features of Effective Professional Learning

Teacher professional learning research has identified characteristics of effective professional learning that recognize the adult learner as an integral component of solving educational problems of practice (Darling-Hammond et al., 2017). Those can be summarized into five influences that I will explain within each subheading: clinical approach, collaboration, pedagogy and management skills, format and structure, and teacher agency.

Clinical Approach. Effective professional learning as part of an EPP suggests a need to increase focus on a clinical approach to support teachers in teacher agency, reflection, and partnered feedback (National Council for Accreditation of Teacher Education, 2010). Specifically, teachers need to solve problems in context, and through partnered reflection and

feedback with a mentor teacher, partner teacher, or other facilitator, new teachers can improve their ability to reflect and refine their instructional practice (Darling-Hammond & Baratz-Snowden, 2007; Knowles, 1980). This creates an environment in which providing professional learning to new teachers through a clinical approach may benefit teachers and thus learners.

However, experienced teachers may also benefit from a clinical approach. Adults gain experiences over time that impact their knowledge and self-directedness to solve problems (Knowles, 1980). Aligning this with the work of Darling-Hammond et al. (2017) to identify key features of effective professional learning yields similarities with a clinical approach. For example, embedding professional learning within modeling, coaching, feedback, and teacher reflection, can cause positive changes to experienced teacher practice (Darling-Hammond et al., 2017). Thus, while this study explores the experiences of job-embedded teachers, the clinical approach may apply to any teacher.

Collaboration. Collaboration in professional learning is multifaceted with a focus on both teacher-teacher collaboration and teacher-administrator collaboration. Collaboration may develop in a variety of ways including PLCs, informal consultation, and sharing of resources and strategies between teachers (DuFour, 2004; Harvey et al., 2022). For example, effective PLCs utilize collaborative learning, shared data, and reflexive discussion to adjust practices to improve student learning (DuFour, 2004). Furthermore, effective collaboration through PLCs is more likely to yield effective professional learning since the implications may be more comprehensive for school instructional change (Dogan & Adams, 2020). Collaboration between teachers and administrators with a shared vision can increase accountability while building trust and teacher willingness to participate in professional learning (Johnson, 2006; Pringle et al., 2020). Specifically, the explicit principal support of new professional learning may yield increased collaboration and adoption of teaching materials and strategies (Banilower et al., 2007). Furthermore, teacher collaborative learning through PLC that is self-directed yet guided by a facilitator tends to produce the most effective learning yielding teacher implementation of

improved instructional practices (Darling-Hammond et al., 2017; Dogan & Adams, 2020). Thus, collaboration is a key support of professional learning practices.

Pedagogy and Management Skills. Job-embedded teachers have diverse backgrounds, and thus diverse professional development needs specific to pedagogy and classroom management (Bowling & Ball, 2018). Job-embedded teachers may lack skills in and knowledge about literacy, numeracy, summative and formative assessment, rubrics, alignment, procedures, rules, and classroom management (Bowling & Ball, 2018). Furthermore, principals often perceive job-embedded teachers as lacking in both pedagogy and management skills despite bringing their industry knowledge to the classroom (Bartholomew et al., 2018; Brenner et al., 2015; Diamond et al., 2020). Thus, pedagogy and management professional learning is important to job-embedded teacher success.

Structure and Format. Professional learning structure and format needs to be aligned with the school structure, PLC, and overall vision to generate changes to instructional practices that impact learning (Daniels, 2016; DuFour, 2004; Fang et al., 2021). For example, in a qualitative study including 32 middle school teachers in southern California, Daniels (2016) learned that teachers are more likely to participate in professional learning when specific attention is given to time within the master schedule for professional learning. Furthermore, incentives to find time for professional learning, such as compensation or release time from teaching duties, may yield greater teacher interest, but ultimately, professional learning needs to be embedded in a school culture and schedule for it to have sustained results (Fang et al., 2021; Garet et al., 2001). Thus, the format and structures necessary for effective teacher learning experiences are part of my conceptual framework.

Teacher Agency. Teacher agency is a critical component of adult learning. Within this conceptual framework, adults learn through andragogy's four principles: 1) the self-concept of a learner shifts from dependent as a child to independent as an adult, 2) adults gain knowledge and experiences over their lifetime that influence their learning, 3) adults' desire to learn is

attached to solving problems in life, and 4) adults need to implement their learning immediately (Knowles, 1980). Thus, my conceptual framework suggests that effective teacher learning comes from experiences that are rooted in andragogy principles.

Complexity Theory Professional Learning Model

The complexity theory professional learning model provides a theoretical framework for this study (Opfer & Pedder, 2011). This PLM provides a basis for the conceptual framework because it identifies that teachers operate in a complex system, and in particular, teachers are influenced by the teacher, the school system, and the professional learning experience (Opfer & Pedder, 2011). In this study, job-embedded teachers are influenced by their personal content knowledge and experiences. They also are influenced by the school and district priorities. Lastly, they are influenced by the professional learning experiences provided by the school, district, or their EPP. I will now explain the systems that influence teachers in the subsequent subheadings.

School and District Professional Learning. This problem of practice explores the professional learning experiences of job-embedded secondary teachers to help them to implement instructional practices. These professional learning experiences may be provided by the school or district. Each school develops an annual professional learning plan that is aligned with the school improvement plan and district priorities. However, in my experience as an administrator in one of the Region A middle schools, the experiences developed at the school level are not generated in tandem or in collaboration with district level professional learning experiences.

Content Knowledge and Experience. Job-embedded teachers have a variety of experiences and rich content knowledge that impacts their teaching. These teachers may have years of experience in a field related to their teaching assignment, or they may have just completed an undergraduate degree unrelated to education. Job-embedded teachers must have a major in the content area in which they teach or have passed the Praxis content exam to

be accepted in the IHE-based or district-based EPP included in this study. So, many job-embedded teachers also bring rich content knowledge through work experience or degree programs that enhance their overall teaching assignment content knowledge.

Educator Preparation Program. Job-embedded teachers are enrolled in or plan to enroll in an IHE-based or non-IHE-based EPP to complete their education coursework. These EPPs may have different purposes, plans of study, and participants, which can make it challenging to compare the specific programs. However, these programs provide coursework that leads to a degree or licensure within 1-3 years of study, and thus providing teaching and learning knowledge to job-embedded teachers.

Implement Instructional Practices

The goal of job-embedded programs in Tennessee is to produce teachers who are effective in instructional practice and thus positively impact student learning. Implementing instructional practices is a broad category that applies to any educator and is a constant focus of education itself. The conceptual framework includes this to identify that as a goal of job-embedded teachers through the nested systems of their content knowledge, experience, EPP, school professional learning, and district professional learning.

Summary of Conceptual Framework

My conceptual framework purposefully centers job-embedded teachers in Figure 1.2 since they are the focus of this study. Job-embedded teachers are influenced by multiple factors as described in my theoretical framework based on Opfer and Pedder (2011). Two factors, district and school professional learning, should include features of effective professional learning such as a clinical approach, collaboration, pedagogy and management skills, format and structure, and teacher agency. Additionally, job-embedded teachers are influenced by content knowledge, their experience, and their educator preparation program. Together, all these factors significantly shape how job-embedded teachers implement instructional practices.

Significance of the Study

Qualitative research has investigated parts of this problem of practice, yet there is a lack of knowledge about the interconnectedness of these facets. We understand that there is a teacher shortage that may be localized to certain areas or certifications (Edwards et al., 2023). In response to the teacher shortage and a need to increase the teacher pipeline, job-embedded EPPs have been created by IHEs, school districts, and other organizations (Tooley, 2023). Education has a general understanding around the features of effective professional learning and distinctions between new and experienced teachers; however, understanding how these facets interrelate and ultimately affect job-embedded teacher professional learning experiences, and their implementation of instructional practices learned has yet to be fully understood.

First, this study is valuable because research has consistently reported that the most important factor in student learning is the teacher (Hattie, 2008). With job-embedded EPPs growing across the United States and Tennessee, we have a potentially growing pipeline of teachers; however, their relative preparedness to teach may be uncertain since they have not yet finished their EPP coursework. This means that schools need to be responsive to the specific needs of job-embedded teachers, create a tailored learning progression as it relates to the complexity theory PLM, and actively consider the perspectives of those teachers. This study provides an opportunity to better understand job-embedded teachers' perspectives in Region A secondary schools, which can then impact implementation of instructional practices.

Second, since there is a growing teacher pipeline through job-embedded programs, there is a need for those new teachers to be successful and remain in the profession. Research suggests that this can happen through leadership support, collaboration, mentorship, and embedded time for effective professional learning experiences (Daniels, 2016; Darling-Hammond et al., 2017; Dogan & Adams, 2018, 2020; Doppelt et al., 2009; Tam, 2015). Without these supports in place, the teachers who have been recruited into these job-embedded programs may not remain in the teaching profession; they may follow the pattern in which the

greatest number of teachers leave the profession within the first five years of their careers (Podolsky et al., 2016). Essentially, teachers who are more effective at implementing high-quality instructional practices are more likely to positively affect student learning outcomes, and thus more likely to remain in the profession (Podolsky et al., 2016). This study can provide recommendations to Region A secondary schools for ways to support job-embedded teachers, foster their success, and increase the likelihood of them remaining in the profession for the duration of their careers.

Key Terms and Definitions

The following section explains key terms and definitions that will be used throughout this capstone report.

District Leaders: These are individuals who work in leadership roles in the school or district. Their roles include district supervisors, executive directors, and assistant superintendents.

Education Leaders: This term refers to district leaders and secondary principals collectively.

Instructional Practices: These practices include methods and strategies used by teachers to deliver content and engage students in the learning process (Darling-Hammond, 2000).

Job-embedded Teachers: Job-embedded teachers are currently enrolled in educator preparation coursework while also working as a teacher of record in a Tennessee school. The Tennessee Department of Education allows for these individuals to complete their coursework requirements while already teaching (Tennessee Department of Education, 2023c).

Traditional Educator Preparation Program: Traditional EPPs may be undergraduate or graduate coursework that prepares students through education classes and internship experiences. Once students finish their EPP and are licensed, then they can teach as a career (National Council on Teacher Quality, n.d.).

Non-Traditional Educator Preparation Program: Non-traditional EPPs may have many differences from traditional EPPs. Non-traditional EPPs may be offered by universities, non-profits, or school districts; they may have a reduced amount of EPP coursework; or they may

allow the teacher candidate to work as a teacher of record before completing the EPP degree (National Council on Teacher Quality, n.d.). In this study, there are two primary non-traditional EPPs that are explained in subsequent definitions: IHE-based EPP and non-IHE-based EPP.

Institute of Higher Education-Based Educator Preparation Program, (IHE-based EPP):

These programs may offer traditional or non-traditional EPPs. In the realm of job-embedded teachers, these programs offer non-traditional coursework from an institute of higher education while the individual is a teacher of record (National Council on Teacher Quality, n.d.; Tennessee Department of Education, 2023c). In this study, there is one primary IHE-based EPP that is provided by the local state institute of higher education for academic core content area teachers and special education teachers.

Non-Institute of Higher Education-Based Educator Preparation Program, (non-IHE-based EPP):

These programs offer non-traditional EPPs. In the realm of job-embedded teachers, these programs provide coursework from a non-profit, school district, or other organization while the individual is a teacher of record (National Council on Teacher Quality, n.d.; Tennessee Department of Education, 2023c). In this study, there is one primary non-IHE-based EPP that is provided by Pooley County Schools for career and technical education teachers. In this study, the non-IHE-based EPP is referred to as the district-based EPP since it is specific to Pooley County Schools.

Principals: These individuals serve as the head school administrator, overseeing school operations, instruction, policy implementation, and budget.

Professional Development: Professional development is a singular, one-time, non-customized to the teacher learning event to instruct teachers on policy, procedure, or instructional practice (Scherff, 2018). This definition may deviate from some schools and districts who use this term to mean ongoing teacher learning events. However, this study focuses on professional development as a singular event to match the literature used in creating this study.

Professional Learning: Professional learning is a series of learning events that change teacher practices through collaboration, modeling, feedback, reflection, aligned to school plans, and recurring (Darling-Hammond et al., 2017).

Professional Learning Model (PLM): A professional learning model is a structure for understanding teacher change. PLMs vary in components, theory of learning, scale, methods, teacher agency, and philosophical foundation (Boylan et al., 2018).

School Administrators: These individuals work as principals, assistant principals, or instructional coaches with the school.

Teacher of Record: A teacher of record is a teacher who has the responsibility for teaching the content tied to standards and performance measures through assessment (National Center for Education Statistics, 2011).

Chapter 2: Literature Review

Understanding job-embedded teachers' professional learning experiences can inform schools and districts to provide appropriate support aligned with adult learning, student needs, and values of job-embedded teachers and their local education leaders. In the context of this problem of practice, job-embedded teachers are currently enrolled in educator preparation coursework while also working as a teacher of record in a Tennessee school. The Tennessee Department of Education allows for these individuals to complete their coursework requirements while already teaching (Tennessee Department of Education, 2023c). Given the current teacher shortage that is broad, yet localized to specific areas and endorsements, K-12 education needs to increase the teacher pipeline and the likelihood that new teachers, particularly from job-embedded programs, remain in teaching (Edwards et al., 2023; Goldhaber & Holden, 2021). Exploring the perspectives of professional learning of job-embedded teachers and local education leaders may illuminate areas of need that can improve teacher practice, student learning, and teacher retention and thus improve the teacher pipeline.

Chapter 1 identified the problem of practice within six secondary schools - three middle and three high - within Region A of the Pooley County School system. There is an increasing number of job-embedded teachers through IHE and non-IHE-based EPPs which has increased teacher supply; however, schools have not identified specific professional learning needed for these job-embedded teachers who have a variety of backgrounds and experiences. Thus, there is a need to understand the job-embedded teachers' and education leaders' perspectives of professional learning about instructional practices to understand their similarities and differences and explore possible recommendations. This study intends to explore this problem of practice through the following research questions:

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?

- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

As I considered these questions, I created a conceptual framework in Chapter 1 (Figure 1.2) that illustrates my understanding of effective characteristics of professional learning and the systems that interact around job-embedded teachers that together ultimately affected job-embedded teachers' implementation of instructional practices. This literature review will help explain what is already known in relation to the research questions by considering the job-embedded programs, the specific needs of job-embedded teachers, and the relationship between teacher shortages and professional learning models. The scope of this literature review is not exhaustive but encompasses frequently cited, relevant literature about job-embedded teachers and effective professional learning models in context.

Articles were included based on four features that are illustrated in Appendix A. I investigated this problem through four topics that include the following: 1) teacher shortage, 2) non-traditional EPPs, including job-embedded EPPs, 3) effective professional learning, and 4) professional learning models. I then reviewed literature that tied each of these four topics to job-embedded teachers or teachers who had completed a non-traditional EPP program because I was interested in learning more about professional learning and PLM research that included job-embedded teachers. In each of these topics, I first reviewed foundational literature, including older publications, to provide the underpinnings of current research for each topic. This foundational literature was identified by being frequently cited in current and older publications, and many were also summarizing the research. Second, I identified studies through ERIC and Google Scholar that described the current context of each topic by exploring both national and state reports and identifying empirical studies that were associated with each topic. Third, I performed a reverse citation search to identify articles that cited the non-traditional pathway professional learning needs. I focused on articles from 2015 to today to select those studies that

were developed after Every Student Succeeds Act of 2015 (ESSA). Since ESSA fostered innovative school practices, a continued focus on accountability, and equity for students, I found a dramatic increase in job-embedded programs developed post-ESSA (Every Student Succeeds Act, 2015). Furthermore, Title II of ESSA guides creating pathways for teaching including job-embedded programs (U.S. Department of Education, 2016). Thus, focusing after 2015 increased the relevance of the literature. However, in instances where the literature was limited, I expanded this date to include introductory studies that informed the limited current literature. Additionally, I used alternative search terms since not all states use the term 'job-embedded teacher' in the same manner. These parameters helped me to develop a literature review to address these research questions.

The focus of this literature review is to explore the problem of practice from a macro to micro scale while exploring job-embedded teachers throughout the chapter. The literature review includes an exploration of the teacher shortage, changes to EPP formats and structure, professional learning needs of job-embedded candidates and new teachers overall, professional learning model (PLM) types, PLM examples in action, and connections to adult learning theory. The literature review is designed to provide insight to my conceptual framework (Figure 1.2) as a basis for the study's importance and subsequent design.

Teacher Shortage

The United States teacher shortage has estimated vacancies ranging between 36,000 to 100,000, and this gap is challenging to calculate since some positions are new roles and others are currently unfilled positions (García & Weiss, 2019; Nguyen et al., 2022). Specifically, in Tennessee, there were more open positions in 2022-2023 than in the previous school year, and this impacts the overall teacher pipeline (Tennessee Department of Education, 2023d). Additionally, since teacher shortage trends vary by content area and state, overall teacher shortages are not necessarily consistent across the United States (Ingersoll, 2001; National Center for Education Statistics, 2022). Furthermore, within states, there are areas of teacher

shortage and excess, especially in states that have a mixture of urban, suburban, and rural areas such as Tennessee (Edwards et al., 2023). Specifically, Tennessee Department of Education (2023) data shows that there were 1,000 vacant teaching positions statewide. In particular, most vacancies were in the middle and lower grade bands, special education, world languages, and English as a second language (Amos, 2023). Trends suggest that there are not enough teachers to meet student enrollment levels, and there continues to be a growing gap between openings and teacher hires (National Center for Education Statistics, 2022; Nguyen et al., 2022; Tennessee Department of Education, 2023d).

This growing gap may be fueled by changes in society's perception of the teaching profession's prestige, and despite teachers having advanced degrees, content knowledge, and autonomy, which are related to society's view of an occupation's prestige, fewer individuals tend to view teaching as a prestigious career (Kraft & Lyon, 2022). While teacher prestige has fallen with less interest in teaching by adolescents, research suggests that teachers are also leaving the profession before retirement for a variety of reasons such as a lack of support from the administration, low compensation, and disagreement with school-decision making (Ingersoll, 2001; Kraft & Lyon, 2022; Wilson & Kelley, 2022). However, to address the teacher shortage, two problems need to be tackled: 1) increasing the teacher pipeline and 2) reducing the number of teachers leaving the profession before retirement (Ingersoll, 2001; Sutchter et al., 2019). However, the reasons that teachers leave the profession may be the same reasons that teachers do not select teaching as a profession altogether, so it may be difficult to match these reasons with teachers leaving the profession (Ingersoll, 2001; Kraft & Lyon, 2022). Nevertheless, understanding teacher recruitment and retention is critical to addressing the teacher shortage.

Educator Preparation Program Considerations

To address the teacher shortage, EPPs are considering a variety of approaches to attract and meet the needs of potential teachers to enter the profession. Teacher education

research has highlighted ways to modify current EPPs to meet the needs of traditional and non-traditional pathway teachers. These considerations to EPPs are especially important given higher expectations of teachers, standards for learning, and teacher workload; teacher preparation is critical to developing teachers who are not only capable but sustainable in the profession (Darling-Hammond, 2006). Revising and reframing EPP coursework to bridge learning and practice between the EPP and the classroom may improve student learning, increase teacher satisfaction, and increase teacher retention (Darling-Hammond, 2006; Ingersoll, 2001).

Part of these considerations include revising the partnership between the EPP and the school. Aligning coursework to classroom experiences is critical to “coherence and integration” between the two organizations to create opportunities for new teachers to implement learning directly within their instruction (Darling-Hammond, 2006, p. 8; Tournaki et al., 2009). This strong partnership through field experiences may include school-based supervision and co-taught classes by an IHE instructor, and, additionally, some IHE instructors may also teach classes at the school which fosters a stronger partnership by remaining immersed in the classroom (Boyd et al., 2007; Darling-Hammond, 2006). Other partnerships may include action research, professional learning, or implementing school reforms (Darling-Hammond, 2006). Strengthening this partnership between the school and IHE may help build EPP and teacher-candidate connections; however, since each EPP is different, it may not be possible to generalize these considerations to all programs.

Additionally, teachers may benefit from applying their coursework in clinical-based classroom experience to implement pedagogy and get feedback from their mentor teacher (Darling-Hammond & Baratz-Snowden, 2007; National Council for Accreditation of Teacher Education, 2010). A more clinical-based approach allows teachers to try new skills and have a gradual release to full classroom responsibility (Darling-Hammond & Baratz-Snowden, 2007; National Council for Accreditation of Teacher Education, 2010). New teachers can use their

EPP clinical experiences to reflect on student data within PLCs and make instructional decisions (Darling-Hammond & Baratz-Snowden, 2007; National Council for Accreditation of Teacher Education, 2010). This may assist teachers to learn from colleagues. Furthermore, EPPs can develop partnerships with states and districts to advance the preparation pathway (National Council for Accreditation of Teacher Education, 2010). This long-term immersion in the field with strong, expert clinical instruction can help connect a new teacher's professional learning to classroom practice (Darling-Hammond, 2006).

Non-Traditional Educator Preparation Programs

Aside from addressing coursework trends, EPPs have also shifted in the number of teachers who complete non-traditional EPPs. Specifically, in 2019, 17.1% of new teachers across the United States came from non-traditional EPPs, yet there was a gap between teacher supply and demand in which approximately 100,000 positions were unfilled (García & Weiss, 2019). Also, the teacher candidates entering non-traditional EPPs come from varied backgrounds in their postsecondary education, including degree type and institution, with some having non-education careers before entry; this creates a varied non-traditional EPP landscape with implications on coursework, teacher candidate recruitment and retention policy, and teacher candidates needs when entering the profession (Goldhaber et al., 2023). So, while non-traditional EPPs, including job-embedded programs, are appealing and a possible solution to teacher shortages, there still is a gap in teacher supply and open positions, a variety of non-traditional programs, and a diversity of teacher candidate characteristics in these programs.

Since non-traditional EPP types, purposes, and participants vary, this creates challenges to understanding how and why the licensure program completion gap exists (Edwards & Kraft, 2024; Tournaki et al., 2009). These programs may include Grow Your Own programs, alternative certification programs, and non-traditional route to teaching programs. In the Grow Your Own programs, community leaders and non-teaching school staff are recruited to pursue a teaching degree while having teacher responsibilities in a school (Gist, 2019). Another version

of this Grow Your Own program introduces teaching as a profession to high school students and encourages them to become future teachers (Gist, 2019). Alternative certification programs generate a teacher license that does not follow the same pathway as traditional license holders, and non-traditional pathway programs address teachers who enter the profession at a different point than traditional educators (Boyd et al., 2007; Gist, 2019). Since these programs are diverse, this literature review and study will focus on non-traditional pathways to teaching through a job-embedded EPP.

It is worthwhile to note that the variety of non-traditional programs, overlapping nomenclature, and differing purposes may create long-term implementation and policy problems (Edwards & Kraft, 2024; Tournaki et al., 2009). For example, in a study of Grow Your Own programs across the United States, Edwards and Kraft (2024) found that a lack of alignment in program purpose, participants, and features made it challenging to understand program effectiveness. Furthermore, the same study found that over 900 districts and 200 IHEs were participating in these non-traditional programs, but purposes varied; the non-traditional program purposes included increasing the teacher pipeline, addressing the teacher shortage, increasing specific certifications (e.g. high school chemistry certification), and increasing teacher diversity (Edwards & Kraft, 2024). This research builds upon the work of Gist (2019) who elevated the need to specify non-traditional programs' purposes - including supporting the economy, workforce, educator preparation, and social justice - to support effective policy decision-making. This research focused on centering social justice and increasing teachers of color while supporting the local economy, improving employment numbers, and preparing teachers to effectively instruct (Gist, 2019). Yet, little research has been done to evaluate teacher effectiveness associated with these programs, making it necessary to gain clarity about the non-traditional EPP initiative to effectively address increasing teacher supply (Edwards & Kraft, 2024).

Types of Non-Traditional Educator Preparation Programs

EPPs with non-traditional routes to certification allow candidates from post-secondary institutions or career experience to enter the teaching profession (Woods, 2016). These non-traditional routes may resemble more traditional EPPs through coursework and years needed to complete the degree, yet others more closely resemble emergency certification routes (Boyd et al., 2007; Gist, 2019; Walsh & Jacobs, 2007). Despite these differences, research suggests that teachers felt more prepared to teach and were more effective teachers measured through student learning outcomes when the from non-traditional EPPs have common characteristics - high standards to enter, pedagogical training, internship supervision, partnership, guided practice, and teacher feedback (Darling-Hammond & Baratz-Snowden, 2007). For example, partnership, guided practice, and feedback include modeling lesson planning, using instructional strategies, and providing feedback to new teachers before giving them full classroom responsibility (Darling-Hammond & Baratz-Snowden, 2007). In contrast, some research suggests that many non-traditional EPPs have vastly different program features, so understanding their common characteristics may be necessary to develop knowledge of effective non-traditional EPPs (Boyd et al., 2007; Edwards & Kraft, 2024; Tournaki et al., 2009).

Cost and Coursework Requirements. Despite these conflicting ideas on common non-traditional EPP features, some additional concerns exist regarding cost, coursework requirements, and outside influences on program structure such as financial support (Irizarry, 2007; Scribner & Heinen, 2009). Non-traditional EPPs need to be flexible and respond to both state-level and local needs which can shift over time (Scribner & Heinen, 2009). Furthermore, non-traditional EPPs can have high costs while having low entrance requirements, possibly leading to less qualified candidates entering the teaching profession (Walsh & Jacobs, 2007). However, other non-traditional EPPs may reduce costs yet increase entrance requirements such as having candidates pass the state licensure exam before enrollment, and this can

negatively impact non-traditional EPP enrollment diversity and hamper the teacher pipeline efforts (Irizarry, 2007).

Enrollment Trends of Non-Traditional Educator Preparation Programs

Overall EPP enrollment in the United States has dropped in the last ten years with it now being 70% of what it was in 2013 (Goldhaber & Holden, 2021; Saenz-Armstrong, 2023; Wilson & Kelley, 2022). Furthermore, in Tennessee, according to Title II reporting, total EPP enrollment has dropped by 48% since the 2014-2015 school year (Saenz-Armstrong, 2023; Tennessee Department of Education, 2022). There are some boosts in EPP enrollment, but those also may be associated with the rise of non-traditional EPPs; however, those programs vary in IHE-based and non-IHE-based formats (Saenz-Armstrong, 2023).

Non-IHE-Based EPP Enrollment. An example of a non-IHE-based format is a district-based EPP. Specifically, non-IHE-based programs are seeing an increase of 162% in enrollment in the last ten years, and the completion rate of both IHE and non-IHE-based programs is higher than traditional programs (Saenz-Armstrong, 2023). Interestingly, in Tennessee, the non-traditional EPP enrollment has remained steady over the last ten years while traditional EPP enrollment has consistently declined (Saenz-Armstrong, 2023). Given these shifts, it may be helpful to understand how and why non-traditional EPPs are retaining and increasing enrollment and completion. In the future, it may be worthwhile to better understand the relationships between non-traditional EPP teacher candidates and student learning outcomes.

Education Leader Perspectives of Non-Traditional Educator Preparation Programs

Considering student learning outcomes, it may be valuable to understand district leaders' and principals' perspectives of non-traditional EPPs since they are responsible for hiring teachers, leading schools, and ensuring student learning. Despite the usefulness of understanding district leaders' and principals' perspectives, there is limited research in this area, and the research that exists is mostly tied to rural education or career and technical education

(CTE) endorsements. However, this limited research can still provide insights. For example, in a study of 39 principals, Bartholomew et al. (2018) learned through a closed-ended survey that most principals perceived non-traditional teacher candidates as having high content knowledge but lacking pedagogical skills. In concurrence with these findings, Diamond et al. (2020) highlighted principals' concerns about non-traditional teachers' dispositions and also found that most principals preferred hiring candidates from traditional programs. In addition, in a series of semi-structured interviews of 10 rural area principals, Brenner et al. (2015) found that principals thought that non-traditional EPPs helped address the teacher shortage, especially in their rural areas, but principals also felt that these teachers lacked important teaching skills including pedagogy, effective communication with students and families, and classroom management. In the same study, one principal even voiced concern about hiring a non-traditional teacher candidate for a state-tested subject and another principal thought that the non-traditional programs did not have selective admission criteria (Brenner et al., 2015). While the studies associated with principals' perspectives of non-traditional teacher candidates included small sample sizes with limited methods and were geographically discrete, these studies may inform future research to better understand how these teacher candidates and their professional learning needs are perceived by principals.

Professional Learning for Teachers

To address professional learning needs for teachers, research provides suggestions for effective structure, implementation, and differentiation of professional learning. Professional learning needs an organized format and structure. Format, including time, is often a major contributor to professional learning implementation; this encourages professional learning to be embedded in the school day with a recurring professional learning plan to increase the likelihood of teacher use and positive student outcomes (Darling-Hammond et al., 2017; Desimone, 2009; Doppelt et al., 2009; Roth et al., 2011; Scher & O'Reilly, 2009). Furthermore, research suggests that teachers need to participate in long-duration professional learning to

cause changes to instruction (Admiraal et al., 2016; Doppelt et al., 2009; Roth et al., 2011; Scher & O'Reilly, 2009). This focus on professional learning that is recurring and embedded helps teachers to improve student learning outcomes.

Features of Effective Professional Learning

Effective professional learning has been defined by Darling-Hammond et al. (2017) as having the following characteristics: “content-focused, active learning, collaboration, modeling instruction, coaching, feedback, reflection, and sustained duration” (p. v-vi). To be effective professional learning activities, these characteristics must be situated in school-based structures of embedded time allocated for professional learning, strong leadership vision, and collaboration (Johnson, 2006; Nelson, 2009; Pringle et al., 2020). Professional learning helps teachers with increased evidence of teacher collaboration and use of effective instructional strategies (Darling-Hammond et al., 2017; Dogan & Adams, 2018, 2020; Tam, 2015).

Continuous and Recurring. Providing recurring professional learning creates an increased likelihood of teacher use and thus positive student learning outcomes (Darling-Hammond et al., 2017; Desimone, 2009; Doppelt et al., 2009; Garet et al., 2001). While studies from Doppelt et al. (2009) and Roth et al. (2011) both allowed teachers to self-select their participation in professional learning, they still show a need for continuous, recurring professional learning. Furthermore, Scher & O'Reilly's (2009) meta-analysis study and the science-specific study from Parke and Coble (Parke & Coble, 1997) show a benefit to longer duration professional learning. Thus, duration is an important variable to consider in planning. This focus on instructional learning that is iterative and recurring will help teachers be better participants in PLC to advance their instructional practice.

Shared Vision with Leadership. Additionally, partnered leadership between school leaders and teachers can foster a collective professional learning goal with increased accountability while positively affecting teacher perception and willingness to actively participate in professional learning (Johnson, 2006; Pringle et al., 2020). Research suggests that teachers

who feel supported by principal leadership are more likely to implement advanced instructional practices and pedagogy on a more frequent basis (Banilower et al., 2007; Pringle et al., 2020). For example, Avidov-Ungar & Ezran (2020) found through semi-structured interviews that principals identified having strong teacher leadership as necessary within the PLC. Furthermore, the principal's support of PLC through shared vision and relevance for the work affects teacher perception and willingness to actively participate in PLC (Johnson, 2006; Pringle et al., 2020). Cooperation and shared leadership can grow the PLC so that the group collectively moves towards improved student outcomes. Professional learning that is embedded, sustained, and partnered with leadership in a shared vision and support has been shown to advance teacher instructional practice.

Collaboration. Sometimes professional learning is embedded within a PLC. The PLC's purpose is to collaborate around student learning and outcomes which can be informed by student assessment, advanced pedagogical knowledge, and innovative instructional practices (DuFour, 2004). Professional learning increases the likelihood of teacher collaboration and the use of effective instructional strategies, and there is a necessity that teachers willfully act as learners in the professional learning process (Darling-Hammond et al., 2017; Dogan & Adams, 2018, 2020; Doppelt et al., 2009; Nelson, 2009; Tam, 2015).

Specifically, teachers working in a PLC show a greater usage of effective instructional strategies as compared to working individually (Dogan et al., 2016; Dogan & Adams, 2020; Tam, 2015). For example, Dogan et al. (2018) reviewed 13 empirical studies that showed evidence of PLC leading to change in teacher practice, student academic gains, teacher collaboration, and student interactions. Students also show improved achievement and improved student-student interactions (Allen et al., 2011; Dogan & Adams, 2018; Roth et al., 2011). Given these positives, teachers need opportunities to improve through high-quality professional learning.

Despite teacher and school adoption of PLC formats, they may not be as effective if all the necessary PLC features are not incorporated; this can create a structure that DuFour and Reeves (2016) term 'PLC Lite.' Structures that impede PLC work include an overreliance on data and disengaged administration which can impact teacher collaboration and the overall vision of the professional learning process (Hudson, 2023; Sims & Penny, 2014). There is uncertainty around job-embedded teachers' knowledge of PLC structure and their use due to the lack of literature. This may create potential PLC implementation and collaboration issues for job-embedded teachers, yet these same job-embedded teachers may also benefit the most from PLC structures. Ineffective PLC structures may negatively impact professional practice and thus student learning, especially for job-embedded teachers who enter the profession with limited educator preparation program experience (Hudson, 2023; Sims & Penny, 2014).

Feedback and Reflection. Additionally, given the complex nature of academic content, pedagogy, and implementation of instructional practices, part of the PLC and professional learning process must include teacher feedback and reflection (Capps et al., 2012; Darling-Hammond et al., 2017; Roth et al., 2011; Smith et al., 2020; Tam, 2015). Part of teacher reflection should include data analysis and revisiting the PLC focus, but that process may require support for teachers to be successful (Nelson & Slavit, 2007). Considering that many teachers need support with the new rigors of revised standards and increased inquiry-based instruction, this reflection becomes more critical as they develop and learn from new lesson plans (Reiser et al., 2017; M. Zhang et al., 2015). The practices of evaluating instruction, pedagogy, inquiry, and data across grade levels can benefit students due to the increased teacher efficacy in seeing progressions and themes through vertical alignment.

Current Professional Learning Models

Scholars have advocated for a variety of professional learning models based on a range of educational theories such as teacher change (Desimone, 2009; Guskey, 2002), teacher professional growth (Clarke & Hollingsworth, 2002), complexity of teacher learning (Opfer &

Pedder, 2011), and componential professional development (Evans, 2008) as shown in the analysis of professional learning models from Boylan et al. (2018). These models show a trend that focuses on teacher reflection and agency to cause teacher change in practice (Boylan et al., 2018; Kennedy, 2014). This places the teacher as the lead learner who reflects on practice with the support of school leadership to affect student learning.

Scholars have developed a variety of professional learning models (PLMs) that are built on how teachers learn in conjunction with teachers' personal beliefs, student outcomes, school context, and reflection, and these models vary in linear, interrelated, and cyclical forms (Boylan et al., 2018). This literature review will explore their structural similarities and differences to understand how these models connect to adult learning and student achievement. This review recognizes the historical perspective that these models have developed over time and potentially in conjunction with other educational shifts. These models show a trend that focuses on teacher reflection and agency to create change-process-oriented professional learning (Boylan et al., 2018; Kennedy, 2014). Nevertheless, it is important to note that there are distinctions between the models, including the specific areas they cover and those they do not. Thus, making direct comparisons may be challenging. Overall, the PLMs place the teacher as the lead learner who reflects on practice with the support of school leadership to impact student learning.

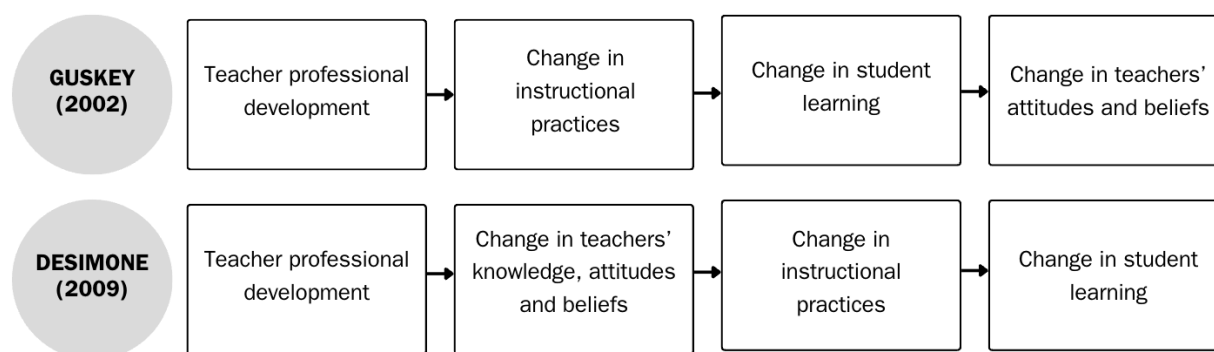
Linear Professional Learning Models. Guskey (2002) and Desimone (2009) both explore professional learning through a linear model to impact changes in instructional practice and student achievement. However, Guskey (2002) focuses on factors of changing teacher practice, student learning, and teacher beliefs while influenced by leadership to implement professional learning. Furthermore, teacher self-efficacy grows when teachers see improvements in student learning, yet these changes are incremental - teacher practice, student outcomes, and changes in teacher beliefs (Guskey, 2002; McChesney & Aldridge, 2021). In comparison, Desimone (2009) considers how these factors occur in reverse order by changing

teacher beliefs to impact practice and then changing student outcomes. In contrast, some linear models do not address teacher changes in beliefs and merely focus on a unidirectional teacher growth model from internal changes to external practice changes (Loucks-Horsley & Matsumoto, 1999). A newly developed linear model by McChesney and Aldridge (2021) explores how professional learning is impeded by specific barriers that reduce its benefit which include structures and the willingness of teachers as learners. While these described PLMs order the changes to teachers and instruction differently, these PLMs are linear in orientation rather than cyclical or interchangeable.

The aforementioned researchers focus on student outcomes as a rationale for professional learning, and identify the external environment as impacting the professional learning process, teacher beliefs, and teacher practice (Desimone, 2009; Guskey, 2002; McChesney & Aldridge, 2021). These models view a linear process (Figure 2.1) that connects professional learning, teacher beliefs, teacher practice, and student outcomes; however, as already discussed, the order of these linear items differs between the models (Desimone, 2009; Guskey, 2002). Figure 2.1 provides a visual representation to compare the foundational Guskey (2002) and Desimone (2009) PLMs and may be used to inform the PLMs necessary to support job-embedded teachers' professional learning.

Figure 2.1

Comparison of Guskey (2002) and Desimone (2009) Professional Learning Models



Note. The figure is a compilation of the models for teacher change between Guskey (2002) and Desimone (2009). The descriptors for each phase were matched between the models for consistency in terminology, but some of the exact descriptor wording was retained to maintain the robustness of the model itself.

These PLMs have been explored in practice to attempt to study their influence on student learning. For example, in a study by Desimone et al. (2013), researchers found a positive relationship between a mathematics professional learning activity, based on Desimone's (2009) PLM, and students' mathematics achievement. While these results may be biased due to the researcher using her own model, the findings are promising, especially when viewed in comparison to other studies. In another example, researchers investigating a Desimone (2009) PLM in science pedagogical content knowledge (PCK) found a positive relationship between professional learning participation and teacher PCK and teacher practices (Yang et al., 2020). Related to research associated with Guskey's (2002) PLM, Kager et al. (2023) investigated how to evaluate the effectiveness of a lesson study PLM. Lesson studies are a collaborative method of professional learning where teachers reflect on lessons, student learning, and teacher practices (Lewis, 2000). Similar to Desimone (2009) and Guskey (2002), the lesson study PLM by Kager et al. (2023) suggests a linear relationship by identifying inputs,

processes, and student outcomes. However, this research also suggests different levels of change; meaning that initially, only teachers will have a change in belief, then they will change practice, next the school will change, and finally student outcomes will change (Kager et al., 2023). Yet, it is notable that the model does not pinpoint components directly influencing student outcomes (Kager et al., 2023). This may be because those direct links are unknown, and this literature review will address the uncertainty of linking PLMs and achievement in upcoming sections. Essentially, these linear models are still utilized in current professional learning, but researchers emphasize the importance of linking professional learning to student outcomes.

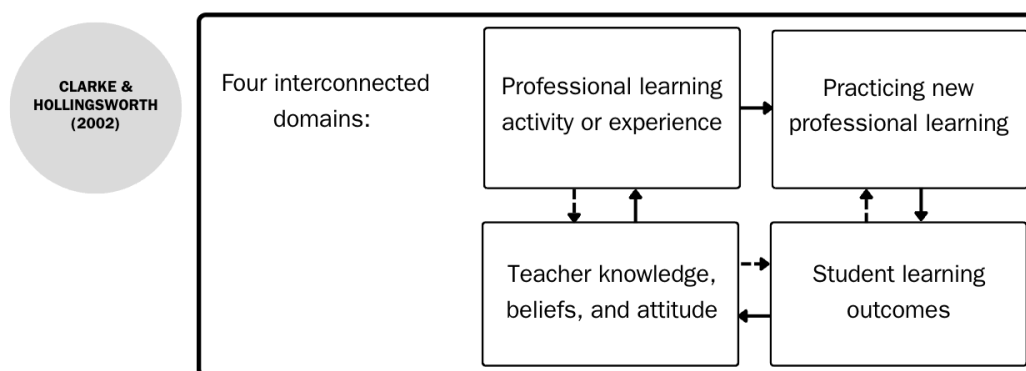
A branch of the linear PLMs was developed by Clarke and Hollingsworth (2002) to focus on specific domains and their interrelatedness which they termed the “Interconnected Model of Teacher Professional Growth” (Figure 2.2). The domains are based on teacher beliefs or attitudes, instructional practice, student outcomes, and the greater school ecosystem (Clarke & Hollingsworth, 2002). Teacher instructional advancements come from multiple entry points rather than a simple linear pathway, and specifically, macro or micro-level teacher changes occur through a series of “reflection” and “enactment” activities that link the domains around teacher change, experiencing learning, trying the new practice, developing the new strategy, and drawing new conclusions about instruction³ (Clarke & Hollingsworth, 2002). Furthermore, this model adopts professional learning ideas that teacher learning impacts students, and student outcomes also impact teacher learning (Clarke & Hollingsworth, 2002). For example, in a study of science teachers who used video to record and analyze lessons based on the Clarke and Hollingsworth (2002) PLM, findings suggested that teachers used reflection and feedback to see their impacts on students which reinforced their teacher learning (Hollingsworth & Clarke, 2017). This provides an example of how an activity impacted students, and through teacher

³ Macro and micro level changes were noted throughout the literature. Macro tended to indicate district or school changes, and micro tended to indicate teacher changes. Some literature referred to meso-level which referred to grade level, subject, or PLC changes within a school.

reflection, the learning was reinforced. In contrast to the linear models, the Clarke and Hollingsworth (2002) model considers teacher reflection as a critical component of professional learning. All of the models, Guskey (2002), Desimone (2009), and Clarke and Hollingsworth (2002), situate professional learning in a social context that impacts teacher beliefs and practice.

Figure 2.2

Summary of Clark and Hollingsworth (2002) Professional Learning Model

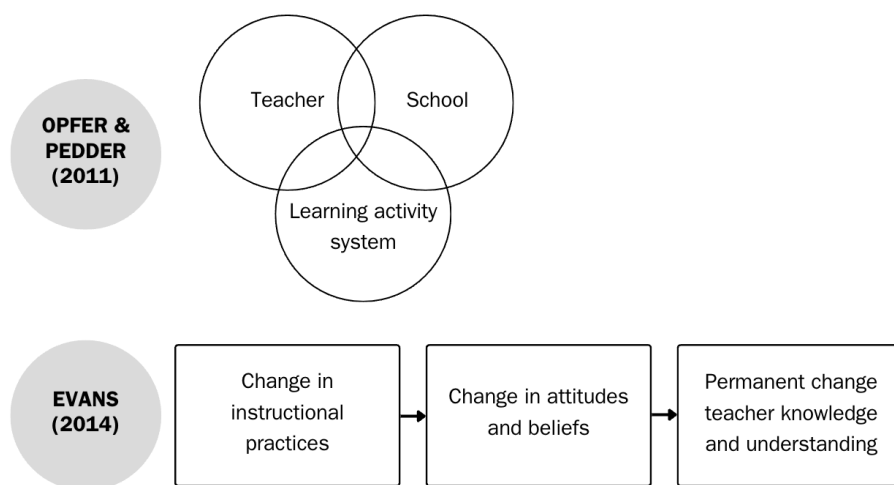


Note. The figure is a summary of the model. Some of the exact descriptor wording was retained to maintain the robustness of the model itself.

Non-Linear Professional Learning Models. Researchers such as Opfer and Pedder (2011) and Evans (2014) address details and the teacher's internal cognitive changes (Figure 2.3). While PLMs should recognize the small-scale internal teacher changes, they should also consider how teachers' cognition adjusts due to professional learning (Evans, 2014). This may be of particular importance when reflecting on PLMs and job-embedded teachers who may bring industry experience to their professional learning. Additionally, professional learning does not always involve elaborate structures; instead, it may be a continuous process of micro-scaled learning that naturally takes place within classrooms, PLCs, or school environments as teachers undergo inherent internal changes (Evans, 2014, 2019; Opfer & Pedder, 2011).

Figure 2.3

Comparison of Opfer and Pedder (2011) and Evans (2014) Professional Learning Models



Note. The figure is a compilation of the models for teacher change between Opfer and Pedder (2011) and Evans (2014). The descriptors for each phase were matched between the models for consistency in terminology, but some of the exact descriptor wording was retained to maintain the robustness of the model itself.

This idea of a cyclical or interchangeable PLM with interrelated points resonates with Opfer and Pedder (2011) who highlight the complexities of teacher learning within a broader context of the school and greater education system. Specifically, Opfer and Pedder (2011) emphasize the importance of understanding the school and teacher “orientations to learning systems that mediate teacher learning and teacher change” (p.394). By addressing the “interacting agents” within the professional context of a school and district, PLMs can understand the complexities of teacher change, instructional change, and its relationship to student achievement (Opfer & Pedder, 2011, p. 396). For example, in a case study, Labone and Long (2016) found that system-based PLMs provided greater coherence for teachers and leadership. Exploring these nested systems and their interconnections, while also considering

the internal changes within the teacher, creates a broader scale model that accounts for teacher micro-level changes.

Specifically, Evans' (2014) model explores the micro-level changes that occur within the teacher's attitudes, behaviors, and cognition from professional learning. A central point of this model is that to motivate teacher change, teachers need to see better alternatives than their current instructional practices (Evans, 2014). For instance, in a case study examining professional development related to oral language and early literacy instruction, Stark et al. (2020) investigated how teachers changed in response to professional learning and whether the existing PLMs effectively accounted for their learning outcomes. While the survey data was self-reported and thus possibly biased, classroom observations yielded evidence that teachers had "private epiphanies, or personal moments of new awareness, insight, or recognition of a 'better way' of knowing, believing, or behaving" which suggests that Evans' (2014) model of internalized cognitive teacher change should be a key component to a PLM (Stark et al., 2020, p. 190). Similar findings were identified by Gore and Rosser (2022) who suggested that teachers exhibited instructional practice changes after reflecting on observing other classrooms across grade levels through teacher instructional round experiences. While both Stark et al. (2020) and Gore and Rosser (2022) identified PLM components from Guskey (2002) and Desimone (2009), they also noted Evans' (2014) contributions to teacher internalization as critical to instructional change. These examples provide further insight into how these PLMs are interconnected.

Due to these differences between the models described in this literature review, critical reflection on PLMs may help inform schools and districts to analyze professional learning's effectiveness (Desimone, 2009). Furthermore, considering how teachers learn as a pathway, cycle, interconnected system, or personal internalization appears to be a necessary understanding for professional learning delivery for job-embedded teachers. Schools and

districts may benefit from analyzing the current PLMs to understand what fits their students and teachers coming from traditional and non-traditional EPPs.

Connecting Professional Learning Models to Adult Learning Theory

While exploring PLMs yields these different models, another exercise views their alignment to adult learning theory. Specifically, professional learning has shifted from experiences that are ‘done’ to teachers to a series of learning that connects teacher reflection and action in response to self-perceived problems (Clarke & Hollingsworth, 2002; Glickman, 1980; Guskey, 2002). Adult learning theories such as andragogy and Mezirow’s transformative adult learning theory address how reflection can change individuals, and this reflection requires individuals to critique their own beliefs (Irby, 2013; Welton, 1995). Specifically, Mezirow identifies that adult learning encompasses critically assessing personal beliefs and structures that cause small, incremental changes that create a transformational change in personal beliefs over time (Welton, 1995). Additionally, Mezirow’s transformative learning theory focuses on the learner to become an “autonomous thinker” who can act independently of others; this means that effective professional learning should help teachers learn new practices, but it also should foster a cognitive change within the individual to intrinsically adopt these changes (Mezirow, 1997, p. 11). Thus, PLMs should be able to situate professional learning that is aligned with adult learning.

Connections between PLMs and andragogy illustrate the relationship between teacher reflection, changing teacher beliefs, and resulting teacher actions in response to the new learning, and this aligns with the main features of adult learning and Opfer and Pedder’s (2011) complexity theory professional learning model as I described in my theoretical and conceptual frameworks (Figure 1.2) in Chapter 1. For example, Guskey’s (2002) PLM suggests that teachers change practice in response to seeing student learning improvements. Desimone (2009) sees professional learning as a model that links teacher knowledge, advanced instruction, and student learning outcomes in a linear relationship, yet criticism of the Desimone

(2009) model from Evans (2014) argues the need to include the teacher's cognition changes due to the learning. Furthermore, Clarke and Hollingsworth (2002) identify a series of interrelated learning processes that highlight the reflection and action parts of the professional learning process. Yet, Opfer and Pedder (2011) explore the interconnected systems that impact learning, which in this study, is of particular interest since job-embedded teachers are influenced by their own experience and content knowledge, their school and district professional learning, and the greater education body of knowledge on effective professional learning to advance instructional practices.

Despite these foundational similarities, there are some conflicts between the PLMs and adult learning theory. Since adult learning theory addresses self-directed learners who make sense of new learning that may conflict with current beliefs, professional learning that is presented in models such as Guskey (2002) and Desimone (2009) may be too linear and not reflect the cyclical nature of adult learning (Irby, 2013; Welton, 1995). Furthermore, specific classrooms, schools, and districts have a contextual and systematic impact on how professional learning is structured; understanding those systematic relationships is a necessary component of building a PLM (Opfer & Pedder, 2011). Additionally, job-embedded teachers need to experience professional learning through andragogy as self-directed learners with life experiences, yet their newness to the profession may mean that they are unaware of their specific learning needs. Thus, comparing adult learning theory and PLMs can help clarify the PLMs and their relative effectiveness in changing teacher thinking and practice.

School and District Applications of these Professional Learning Models

Despite the depth of literature on effective PLMs, the actual implementation in schools and districts of PLM-related professional learning programs is extremely diverse (Hill et al., 2013; Labone & Long, 2016). However, given the frequent citations of PLM works such as Guskey (2002), Desimone (2009), Clarke and Hollingsworth (2002), Opfer and Pedder (2011), and Evans (2014) and effective professional learning by Darling-Hammond et al. (2017), there is

an opportunity to review examples of these PLMs in practice by exploring published research. The following section will explore a sampling of models based on the literature already discussed.

Desimone's (2009) work generated a PLM framework that follows a path from changing teacher beliefs, instructional practice, and student outcomes. PLMs are diverse; they are implemented across varied programs and to different degrees that necessitate recognizing the individual learner and the broader system of the school (Labone & Long, 2016; Sancar et al., 2021). Additionally, as McChesney and Aldridge (2021) identify, professional learning activities have barriers to full implementation such as structures and willingness of learners. For example, in a study of the Quality Teaching Framework, a model focusing on pedagogy to improve student thinking and based on Desimone's (2009) PLM, Labone and Long (2016) analyzed its implementation in three schools through a case study, and the research suggested that professional learning has the fewest barriers to implementation when part of a collaborative school effort with leadership support and flexibility. However, findings reiterated the necessity of school leadership in professional learning support (Darling-Hammond et al., 2017; Labone & Long, 2016). This provided an example of professional learning that increased teacher knowledge and beliefs to advance instructional practice and student learning.

Additional studies combine the seminal PLMs for use in professional learning contexts. In particular, Stevens et al. (2022) measured the effectiveness of a reading comprehension professional learning activity that was based on the work of Desimone (2009) and Garet et al. (2001), and researchers found that experiences coupled with reflection and coaching were more successful to change instructional practice and improve student achievement. While there were some limitations of the data due to its self-reported nature by teachers in the study, it is promising that a combination of PLMs may change teacher practice and improve student achievement. Similarly, professional learning activities developed from a combination of PLMs by Desimone (2009) and Guskey (2002) suggest a greater likelihood that teachers will

implement the instructional practices, enjoy collaboration within professional learning, and improve school culture (Brooks et al., 2021; Gore & Rosser, 2022). However, it is discouraging that these studies did not investigate student achievement outcomes (Brooks et al., 2021; Gore & Rosser, 2022). These examples show that PLMs are often used in combination in practice.

Similar findings were seen in other professional learning activities that were based on the seminal works. For example, in a lesson study model developed by Coenders and Verhoef (2019) and based on the Clarke and Hollingsworth (2002) PLM, researchers found evidence of student engagement, student collaboration, and teacher reflection. However, they did not investigate student achievement, and since education's arguable goal is to improve student learning, continuing to review achievement based on professional learning is important. Additionally, the lesson study described by Coenders and Verhoef (2019) follows a different PLM than that of Kager et al. (2023). This may create a conflicting situation since the lesson study professional learning activities in this review used two different PLMs. Further investigation of the specific professional learning components may reveal similarities and differences between these two lesson study professional learning activities and a better understanding of this foundational difference.

While literature describes examples of PLMs in context, additional literature, such as Hill et al. (2013) and McChesney and Aldridge (2021), is critical of professional learning implementation. Specifically, in a meta-analysis of 12 studies by Cirkony et al. (2021), researchers suggest that education needs to consider high-quality professional learning features and how professional learning is implemented to create an environment conducive to professional learning. Supporting this, Ahadi et al. (2021) reviewed 41 professional development studies and found that most PLMs were not implemented with fidelity. Furthermore, only a few studies evaluated the overall effectiveness of professional learning, making conclusive insights challenging (Ahadi et al., 2021). So, while school context is important for understanding the

broader system, this suggests that changing professional learning implementation may create less effective professional learning, instructional practices, and student outcomes.

Some implemented PLMs suggest that these seminal models need revision. Sancar et al. (2021) build on Desimone's (2009) model to address the complexities of the individual teacher working within the system. Specifically, their revised model adds a cyclical process of interrelated components from teacher learning to instructional practices through a series of actions including curriculum, collaboration, and the school context (Sancar et al., 2021). Additionally, Ehrenfeld (2022) and King et al. (2023) argue that professional learning is not linear but rather a series of interrelated systems from macro to micro scale. Similar to Clarke and Hollingsworth (2002), this recent research shows a developing idea of nested systems that are scaled and cyclical.

Furthermore, some PLMs have developed multiple variations of the seminal work to create a different model that is only loosely connected to the original literature. For example, in a study by the Education Endowment Foundation in the United Kingdom, Brown (2017) completed a process evaluation to understand the implementation of what Brown termed "research learning communities" (RLC) whose focus was to increase research use in schools (p. 388). For context, a process evaluation measures if a program has been implemented as intended and met its outcomes (Mertens & Wilson, 2019). The RLC professional learning activity was developed from the Guskey framework (2002) and focused on teachers' need to make connections between practice and research while aligned with strong leadership, cycles of inquiry, and implementation (Brown, 2017). Through the process evaluation, Brown (2017) learned that the RLC model increased teacher implementation of research-based instructional practices, but there was limited evidence of student achievement improvement. In an additional study based on the Brown (2017) RLC model, Mintz et al. (2021) found that small-scale RLC-based changes to instruction developed into larger whole-school changes with teacher input and support. This suggests that the teachers were more engaged with professional learning and

saw themselves as researchers within the classroom; however, the study did not identify specific student achievement as an outcome of the research (Mintz et al., 2021). This suggests that while there were observed teacher changes, there were no measurable student changes within the study's timeline (Mintz et al., 2021). Given these findings, the student outcome and achievement piece may need to be explored in subsequent studies to measure the long-term impacts. While this research shows a connection between a professional learning program, the RLC in this instance, and PLM research from Guskey (2002), there is an apparent disconnect between professional learning features and achievement.

Professional Learning Models for New Teachers

While PLMs provide a foundation for adult learning and sequencing of teacher changes, they are applicable within the context of a school or district. Yet another context to consider with PLMs is teacher experience. Designing professional learning specific to new teachers through PLM may yield promising results. This next section will explore common types of professional learning possible for new teachers, including those who are job-embedded teachers.

Professional Learning through Mentoring and Induction Programs

Mentoring and induction programs provide professional learning through relevant content, long-term learning, and differentiated learning with school leadership support. The literature uses both mentoring and induction as terms for similar and interchangeable programs, so this literature review will refer to both collectively. Research suggests that a comprehensive, multifaceted mentoring program yields the best results for student learning, teacher satisfaction, and teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Keese et al., 2023). However, Ingersoll and Strong (2011) note that more research is needed to determine what mentoring program content is most effective and why it is effective. While mentoring and induction programs tend to focus on policy and procedures, a three-year longitudinal study by Kane and Francis (2013) suggests that instructional practices and engagement should be key program components along with differentiated program participant

options (Karlberg & Bezzina, 2022; Keese et al., 2023; Shillingstad et al., 2014). New-to-the-profession faculty have different learning needs than experienced faculty who are new to a school or district. For example, first-year teachers often describe year one as “surviving” as compared to experienced teachers; experienced teachers appear to be more comfortable with learning school procedures and can learn high-impact instructional strategies (Bressman et al., 2018; Karlberg & Bezzina, 2022). Differentiating program content can meet the needs of both new and experienced faculty to a school.

Aside from content, research identifies mentoring and induction program needs around duration, organization, and leadership support which may provide insights into supporting new teachers. Studies suggest that long-term mentoring and induction programs (three years or more) with in-depth program content yield improved student achievement and teacher retention (Glazerman et al., 2010; Ingersoll & Strong, 2011; Kwok et al., 2021). Additionally, mentoring and induction program organization with structured and intentional peer groups can yield long-term benefits; however, these studies are small in size and include self-reported data that could cause potential bias (Geeraerts et al., 2015; Kwok et al., 2021). Mentoring and induction programs appear to benefit new teachers with long-term mentorship that is structured and intentional.

Research suggests that collaboration, relationships, and strong mentors are key needs of mentees (Bullough, 2012; Clark & Byrnes, 2012; Ingersoll & Smith, 2004; Kapadia et al., 2007; Kwok et al., 2021; Uitto et al., 2016). Mentoring and induction programs may maximize benefits with persistent, organized collaboration through common planning time, common teaching assignments or grade levels, and release time for classroom observations of each other (Clark & Byrnes, 2012; Ingersoll & Smith, 2004; Kapadia et al., 2007; Uitto et al., 2016). Specifically, in a case study of 5 middle school teachers, Martin et al. (2016) found that the aforementioned examples of collaboration in mentoring programs impact retention. Additionally, a good match must exist between the mentee and mentor including common planning time,

subjects, and grade level taught to foster a positive relationship between mentee and mentor for improved student outcomes (Bullough, 2012; Iancu-Haddad & Oplatka, 2009; Kwok et al., 2021; Martin et al., 2016). Also, since mentees who are new to the profession often find their first year a struggle, having high-impact mentors at immediate times of need is important to developing new teachers (Kane & Francis, 2013). These mentoring features may support new teachers as they join the profession.

Pedagogy and Classroom Management Needs of New Teachers

Aside from mentoring and induction, research suggests that professional learning needs to be specifically tailored to job-embedded teachers to meet their pedagogical and classroom management needs. For example, as job-embedded teachers gain pedagogical skills to teach specific content and management skills to employ classroom routines and structure, they need to implement them and have time for reflection on student learning outcomes (Anderson & Boutelier, 2021; Bowling & Ball, 2018). Furthermore, these teachers will be more likely to remain in the profession due to relationship-building with colleagues through professional learning experiences (Anderson & Boutelier, 2021).

In a study by Bowling and Ball (2018), researchers identified that the variety of non-traditional EPP coursework, duration, and requirements generated teachers who had a diverse set of needs. However, the research did suggest that job-embedded teachers have some learning needs in common: skills in literacy, numeracy, summative and formative assessment, rubrics, curriculum alignment, procedures, rules, and classroom management (Bowling & Ball, 2018). In particular, teacher knowledge of literacy and numeracy pedagogy may be indicative of teacher effectiveness and thus student success, but this may be a product of an EPP's focus (or lack thereof) on literacy and numeracy in the required courses (Goldhaber et al., 2023). Comparatively, some research suggests that more selective non-traditional EPPs, based on GPA and class rank, may yield more effective teachers; the pathway of traditional or non-traditional does not matter, and what matters is the selectiveness of the EPP itself (Goldhaber et

al., 2023; Whitford et al., 2018). Also, while job-embedded teachers often bring content expertise, they do not have the pedagogical skills, including those needed to support special education and gifted education students, that come with formal EPP courses (Whitford et al., 2018; G. Zhang & Zeller, 2024).

Given these job-embedded teachers' needs, bolstering their professional learning can support student learning and create long-term retention. In a study by Zhang and Zeller (2024), findings showed that teachers in a non-traditional pathway without embedded support were more likely to leave teaching as compared to their peers in traditional or a job-embedded role with school year and summer professional learning support. This may suggest that mentoring and induction programs may help fill this gap and that schools and districts should be considering ancillary support in conjunction with non-traditional EPPs (Bowling & Ball, 2018). Lastly, since research on job-embedded teaching is limited, our understanding of the needs of job-embedded teachers is still developing as education explores this issue.

Impact of Teacher Mentoring and Induction Programs

Faculty mentoring or induction programs may improve instructional practices, increase student achievement and growth scores, and increase teacher satisfaction, yet they can be challenging to implement due to limited resources of time and the need for strong program leadership (Ingersoll & Strong, 2011; Shanks et al., 2022). New-to-the-profession mentoring and induction programs may help mentees better organize instruction, create routines, and facilitate effective classroom management skills (Thompson et al., 2004; Wong, 2005). Despite these benefits, there is little evaluation research to identify the most effective mentoring program components (Clark & Byrnes, 2012; Shockley et al., 2013). In a qualitative meta-analysis of 10 empirical studies on teacher induction implementation and efficacy, Shockley et al. (2013) found a lack of evidence around the most effective program components; factors such as funding and the organization may drive mentoring program structure more than adult learning theory. Thus, research suggests that mentoring and induction is a worthwhile endeavor, but the specifics on

components and underlying theory for program structure may be lacking.

Nevertheless, mentoring and induction reduces teacher isolation and attrition due to time for personal reflection and collaboration (Ingersoll & Strong, 2011; Karlberg & Bezzina, 2022; Shanks et al., 2022; Wiens et al., 2019). Evidence from studies by Ingersoll and Strong (2011) and Kapadia et al. (2007) suggest that mentoring benefits teachers new to the profession with improved job satisfaction, commitment, and retention. Furthermore, teachers learn instructional methods and pedagogy in EPPs, they can continue learning effective instructional practices through mentoring and induction programs (Glazerman et al., 2010; Thompson et al., 2004). Research linking mentoring and induction with instructional strategies and student outcomes tends to be conflicting and sometimes inconclusive, yet they collectively suggest that mentoring and induction programs most impact instruction when they are long-term and intensive, rather than short-term and less formal (Glazerman et al., 2010).

Impacts of Job-Embedded Teachers on Student Learning Outcomes

Ultimately, continuous improvement in student learning outcomes is a school and district goal, including within Pooley County Schools. Furthermore, the greatest factor in student learning is the teacher, including pedagogy and classroom management (Hattie, 2008). As teachers gain experience, teachers make improvements to their instructional practice (Uriegas et al., 2014). Specifically, in a study by Uriegas et al. (2014), research suggested that there was no differences in the number of discipline referrals input between traditional and job-embedded teachers in 5 middle schools and 3 high schools in Texas. However, the study does not differentiate job-embedded teachers into entering teaching immediately after obtaining a post-secondary degree and those entering teaching after career experience; thus, having those separate data points may provide more informative findings (Uriegas et al., 2014). These findings may reiterate the importance of content and pedagogy knowledge that are highlighted in principal perspectives of job-embedded teachers (Bartholomew et al., 2018; Brenner et al., 2015; Diamond et al., 2020). Thus, there may be some conflict between the relative importance

of job-embedded teacher content knowledge in comparison with pedagogy and management skills.

Conclusion

K-12 education is suffering from a teacher shortage whose needs are specific to local areas and certifications, yet with the pervasive national problem of declining teacher prestige and increasing turnover, the educational system needs to adapt to recruit and retain teacher talent (Edwards et al., 2023; Ingersoll, 2001; Kraft & Lyon, 2022). One way the education system has adapted is to create non-traditional EPPs to recruit candidates from different backgrounds and levels of experience (Goldhaber et al., 2023). Non-traditional EPPs that develop teachers who have more positive effects on student learning tend to have similar features including selectivity, strong internship experiences, collaboration, and mentor and supervisor feedback (Darling-Hammond & Baratz-Snowden, 2007). Furthermore, while overall EPP enrollment is tending to drop nationally, many non-traditional EPP enrollments are rising, especially those not tied to IHEs such as district-based EPPs (Saenz-Armstrong, 2023). Specifically, job-embedded teachers benefit from earning a teacher salary while completing coursework. Despite identifying characteristics of strong EPPs, principals still report that they are less likely to hire from non-traditional routes and have concerns about the fundamental pedagogical skills of job-embedded teachers (Bartholomew et al., 2018; Brenner et al., 2015; Diamond et al., 2020)

One means of addressing job-embedded teachers' pedagogical deficiencies is through effective professional learning that is collaborative between teachers with opportunities for reflection and feedback (Darling-Hammond et al., 2017). PLMs provide a means to connect adult learning theory, personal beliefs, student outcomes, school context, and reflection (Boylan et al., 2018). Additionally, PLMs may vary in pathways and implementation, and this may impact the generalizability of PLMs across all job-embedded teachers (Boylan et al., 2018). However, there is evidence that PLMs incorporating mentoring and induction yield the best results for

student learning, teacher satisfaction, and teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Keese et al., 2023). Specifically, job-embedded teachers benefit from professional learning in pedagogy, assessment, and classroom management to cause long-term retention, job satisfaction, and improved student learning outcomes (Ingersoll & Strong, 2011; Karlberg & Bezzina, 2022; Shanks et al., 2022; Wiens et al., 2019). Thus, continuing to support job-embedded teachers through professional learning within a PLM may have positive impacts on both teachers and students.

This literature review informs this study to better understand how Region A can support job-embedded secondary school teachers. While the job-embedded programs have recently been implemented, Region A has not explored the specific professional learning needs of this teacher cohort. By understanding the job-embedded teachers' and their education leaders' perspectives of professional learning experiences, we may improve teachers' instructional practice and thus student learning.

Chapter 3: Methods

This chapter explains the purpose of the study and research questions. I will describe the research design, case, participants and sampling, data collection, and analysis methods in alignment with my literature review and conceptual framework (Figure 1.2).

As noted in the literature review, teacher shortage is a national issue with local context and possible solutions that include non-traditional educator preparation program (EPP) routes to alleviate teacher shortage and increase the teacher pipeline (Edwards et al., 2023). Teaching vacancies range from 36,000 to 100,000 nationwide, yet efforts to increase enrollment through non-traditional programs may also yield fewer candidates than desired (García & Weiss, 2019; Saenz-Armstrong, 2023). For example, in Tennessee in 2022, EPP completion varied by route: 2,062 individuals completed traditional EPPs, 600 individuals completed non-traditional IHE-based-EPPs, and 141 individuals completed non-traditional non-IHE-based-EPPs (Saenz-Armstrong, 2023). The differences in completion are most likely due to the larger size of traditional EPPs in comparison to non-traditional EPPs; however, Tennessee continues to have a teacher shortage with school district leaders reporting 12-19% of teaching positions unfilled at the start of the 2022-2023 school year (Tennessee Department of Education, 2023d). One means of addressing this shortage is to continue to produce job-embedded teachers through non-traditional EPPs. In the context of this problem of practice, Tennessee job-embedded teachers are currently enrolled in educator preparation coursework while also working as a teacher of record in a school. The Tennessee Department of Education allows for these individuals to complete their coursework requirements while already teaching (Tennessee Department of Education, 2023c).

While addressing the teacher shortage is an immediate need, teacher professional learning is essential to improve instructional practices. Improved instructional practices can then advance pedagogy, reduce teacher attrition, and boost student learning outcomes (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011). Furthermore, professional learning models (PLMs) can

be aligned with school and district plans while addressing the mentoring and induction needs of new teachers (Desimone, 2009; Pringle et al., 2020). Despite these opportunities, there is a gap in understanding the perspectives of job-embedded teachers and their education leaders around professional learning needs to implement instructional practices. This study explores the following research questions:

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?
- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

Gaining insight into this problem of practice from the perspectives of job-embedded secondary teachers and education leaders can help inform programs and policies on professional learning. In this study, education leaders include both district leaders and Region A secondary school principals.

Chapter 1 explained the problem of practice to understand job-embedded secondary teachers' and education leaders' perspectives of professional learning within the broader context of the national and state teacher shortage and new teacher pipeline EPPs. Chapter 2 explored the literature to understand how EPPs have changed in response to national and state concerns about teacher shortage and pipeline. Chapter 2 also explored the features of effective professional learning, their models, and the implications to support novice teachers who also have career experience.

Research Design

This chapter describes the overall methodology; research site, participants, sampling technique; overall description of the interviews and document analysis instruments; an

explanation of the trustworthiness, triangulation, and ethical considerations within the study; and the limitations and delimitations of the study.

This study uses qualitative methods to investigate the research questions. Qualitative research can help a researcher understand their environment and situations in a natural setting (Lochmiller & Lester, 2017). Qualitative research provides insights into the social world and lived experiences of individuals by providing thick, rich descriptions of the natural setting and helps individuals explain the world around them (Merriam & Tisdell, 2015; Weaver-Hightower, 2018). Furthermore, as a qualitative researcher and “primary instrument” of the study, I was reflexive to understand the world around me and my research decisions throughout this study (Merriam & Tisdell, 2015, p. 16; Weaver-Hightower, 2018). I will explain how my position and role impacted the study and how the study impacted me as the practitioner-researcher.

This study used an exploratory case study approach to gain a comprehensive understanding of a problem and those involved (Hancock & Algozzine, 2017). I selected a case study for this problem of practice because it allowed me to focus on a group of people, job-embedded teachers, and their education leaders, within an organization in a bounded unit (Merriam & Tisdell, 2015). This exploratory case study allowed me to explore a shared natural context and illustrate the experiences of those individuals while investigating multiple pieces of evidence to gain an understanding of the problem (Farrow et al., 2020; Hancock & Algozzine, 2017). Specifically, the case study allowed me to remain flexible throughout the study, yet I could create a theoretical framework before data collection that helped me situate this new learning into existing theories (Farrow et al., 2020). Furthermore, case study research had advantages for this study because I was situated in the setting as a practitioner and participants may have greater trust and confidence in me; thus, participants may have been likely to disclose information, and I may have had a greater influence on the likelihood that my recommendations cause positive change in the organization (Atkins & Wallace, 2012).

Case Context

The study is situated in Pooley County Schools, which is located in Tennessee. Much like Tennessee as a state, Pooley County Schools is diverse with urban, suburban, and rural areas. Pooley County Schools is divided into regions, and this case study explores the secondary schools (middle and high schools) located in Region A. Region A has three middle schools and three high schools that mostly feed each other; this means that students from the middle schools generally attend the same high school within the Region. The schools have been consistently identified as Reward Schools by the Tennessee Department of Education and have some of the highest standardized test scores within the district and state (Tennessee Department of Education, 2024c). All six of the schools in this case study are in the same geographic area of the county.

Pooley County Schools is part of a fast-growing county, which has risen in population by 10% from 2010-2020 (United States Census Bureau, 2024). Additionally, Pooley County's median income is \$68,580; however, the percentage of economically disadvantaged (ED) students in the county is 21% (Tennessee Department of Education, 2024b; United States Census Bureau, 2024). All but one school in Region A has a lower ED rate than the rest of the county, thus the majority of students in Region A tend to have a higher socioeconomic status as compared to their peers in other parts of the county (Tennessee Department of Education, 2024b; United States Census Bureau, 2024). This may translate to many students having access to educational opportunities in pre-K and an overall readiness to learn at Region A secondary schools. However, this study cannot assume that all students are ready to learn and are on grade level.

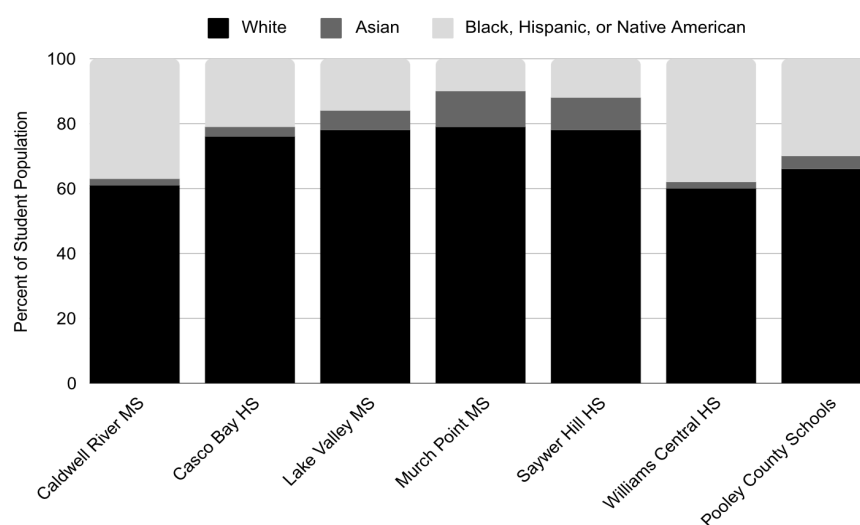
The schools in this study have some similarities and differences. I will explain those similarities and differences to provide a thick, rich description of the study setting. Each high school has two to three feeder middle schools; however, all of the feeder middle schools are not necessarily in Region A. I will identify those middle schools that are not in Region A, but I will

not be exploring those schools since this case study is specifically investigating Region A middle and high schools. A detailed summary of the differences in demographics can be found in Table 3.1 of Appendix B. I will provide an overview of this summary in this chapter.

The secondary schools in Region A have some similarities and differences in demographics as detailed in Table 3.1 of Appendix B and summarized in Figure 3.1 of this chapter. The schools are predominantly White, with the subgroup Black, Hispanic, or Native American (BHN), as the second largest group in each of the schools, as shown in Figure 3.1. The exception to this is Murch Point Middle School, where the largest subgroup is Asian (Tennessee Department of Education, 2024b). In particular, all but Williams Central High School has a student population that is 60% or more White, and the populations of Asian, Hispanic, Black or African American, or Native American varies between each school, but most are between 5-10% of the population (Tennessee Department of Education, 2024a). Also, most of the secondary schools in Region A have a higher percentage of White students as compared to the rest of the Pooley County School District (Tennessee Department of Education, 2024b).

Figure 3.1

Comparison of Racial and Ethnic Student Groups in Region A Secondary Schools



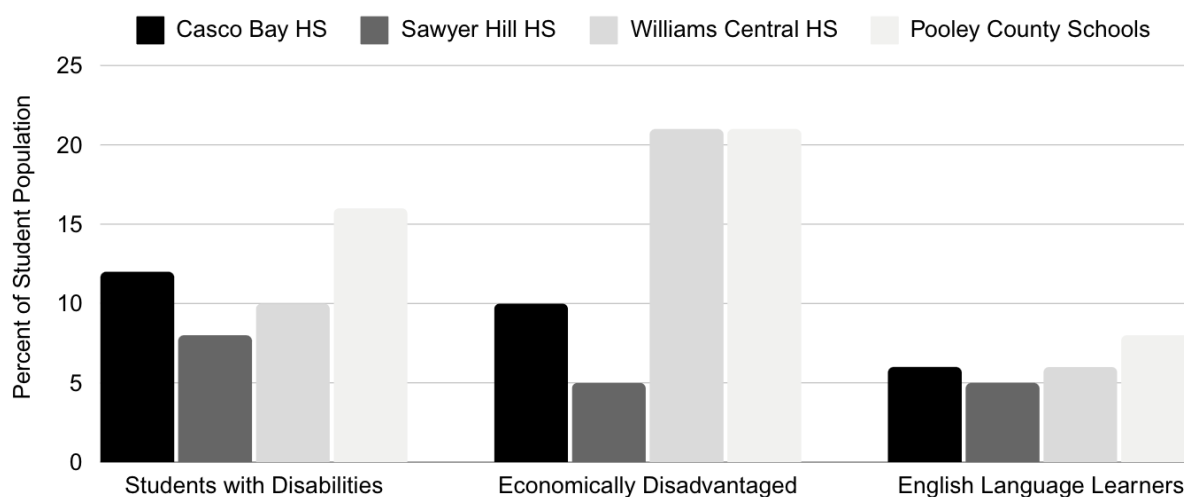
Note: Data obtained from the Tennessee Department of Education (2024b).

Similarly, students with disabilities (SWD) range from 8% to 16% in each school; however, their total school enrollments also vary, so those percentages can be deceiving without looking at actual student numbers (Tennessee Department of Education, 2024b). An overview of these differences between Region A high schools and Region A middle schools is shown in Figures 3.2 and 3.3, respectively. For example, 15%, or 178 students, fall into the SWD subgroup of Caldwell River Middle School's 1,187 students; however, in comparison, Murch Point Middle School has identified 10%, or 132 students of its 1,328 population as SWD, and Lake Valley Middle School has identified 10% or 113 students of its 1,132 population as SWD (Tennessee Department of Education, 2024b). In this example, Caldwell River has more students identified as having a disability, yet they have a smaller school population than Murch Point and Lake Valley. Furthermore, Caldwell River Middle School has a greater percentage of students identified as having a disability and as economically disadvantaged as compared to the school district (Tennessee Department of Education, 2024b). A higher percentage of students with disabilities may yield differences in teacher assignments, course options, and scale of student services offered.

These differences extend further when viewing the economically disadvantaged (ED) and English language learner (ELL) populations. Again, when comparing Caldwell River Middle School with Murch Point Middle School and Lake Valley Middle School, Caldwell River has a higher percentage of ED and ELL populations in comparison to Murch Point (Tennessee Department of Education, 2024b). While school sizes are similar, these differences may create situational differences that impact the teacher and student experiences.

Figure 3.2

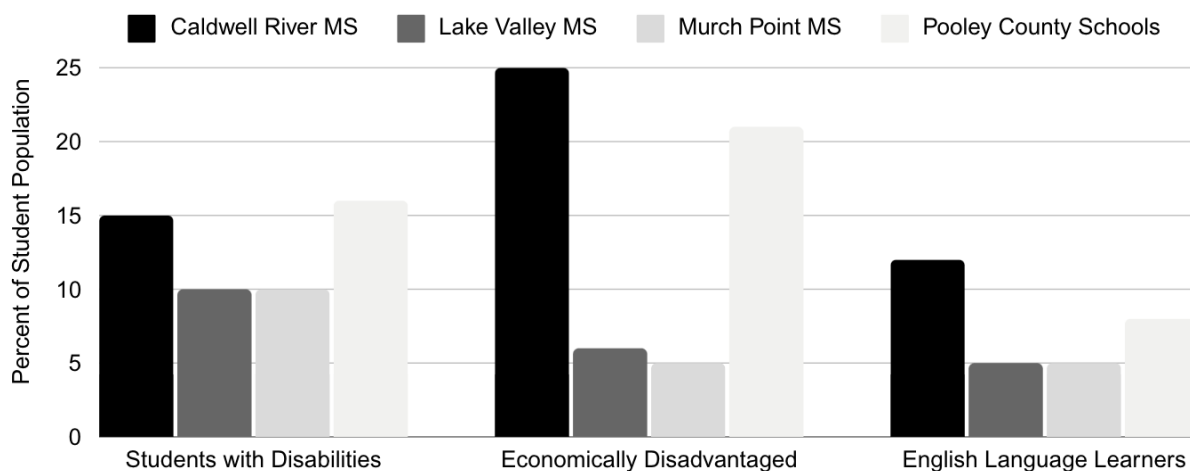
Comparison of Special Populations in Region A High Schools



Note: Data obtained from the Tennessee Department of Education (2024b).

Figure 3.3

Comparison of Special Populations in Region A Middle Schools



Note: Data obtained from the Tennessee Department of Education (2024b).

Similar comparisons show between the high schools associated with these middle schools. For example, Casco Bay High School and Sawyer Hill High School, both of which

receive most of their students from Murch Point Middle School and Lake Valley Middle School, have similar SWD, ED, and ELL demographics of their feeder schools. Also similar in pattern, Casco Bay and Sawyer Hill High Schools are more similar to each other than they are to Williams Central High School. I will consider how these school similarities and differences impact the qualitative data collected through this case study.

Participants and Sampling

I selected the study participants by convenience sampling. Convenience sampling is a type of purposive sampling that is helpful in “information-rich cases,” and this study explored the issue of job-embedded preparation programming that has a central focus and issue (Merriam & Tisdell, 2015, p. 96). The researcher selects participants using convenience sampling based on ease of access due to constraints such as time, finances, and availability (Merriam & Tisdell, 2015). I selected the participants from the Region A secondary schools and associated education leaders since it is the focus of the study and accessible to me as the researcher.

Since the study is grounded in the theoretical framework of complexity theory professional learning model, I wanted to have a representative, accessible sample that reflected Region A job-embedded teachers and their education leaders to better understand their perspectives on professional learning (Opfer & Pedder, 2011). This type of sampling helped me determine the central themes that emerge from the participant sample (Irby, 2013). I began by using criterion-based selection to determine the attributes of the participants (Merriam & Tisdell, 2015). Based on the study’s research questions, I selected job-embedded teacher participants who fit the following attributes: 1) job-embedded teachers working in a Region A secondary school, 2) job-embedded teachers in years 0-3 of teaching, and 3) job-embedded teachers currently enrolled in a job-embedded EPP or enrolled in job-embedded EPP within the next six months. I selected education leader participants based on individuals who are district leaders associated with job-embedded teachers or who are principals in a Region A secondary school. In data collection, the participants were coded by school to assist in data analysis and find

potential themes within schools; however, data analysis was also developed to find themes across middle schools, high schools, and all secondary schools.

Education Leader Participants

I included two groups of education leaders in this study: 1) district leaders who were associated with job-embedded teachers and 2) Region A secondary school principals. Convenience sampling allowed me to access these leaders within secondary schools of the same region of the district, Region A. I emailed the district leaders and principals of Region A secondary schools (Appendix C) to invite them to participate in the study, and I included a study information sheet (Appendix D). I invited six district leaders associated with job-embedded teachers and professional learning and invited six principals across the six Region A secondary schools to participate in the study. Additionally, I requested that district leaders and principals send any documents that could provide information about the professional learning provided to job-embedded teachers regarding implementing instructional practices.

District Leader Participants. District leader participants were one participant group since they have input on the professional learning of job-embedded teachers from a district-level perspective. Using convenience sampling, I selected district leaders who either support the entire district or who directly supported Region A. Specifically, Region A serves 17 schools including three high schools, three middle schools, and 11 elementary schools. These schools are feeder schools, meaning that most students progress together to the next school in sequence. As already described, I invited six district leaders to participate, and four leaders agreed to participate in an interview. Table 3.2 describes the district leader participants.

Table 3.2*District Leader Participants*

Pseudonym	Job responsibility	Previous roles
Grace Morgan	District teaching and learning leader	District leader, principal, state role, and elementary teacher
Stella Harper	Region A leader	District leader, principal, and elementary teacher
Jack Turner	Region A leader	Principal, coach, and secondary teacher
Ingrid Blake	District EPP leader	District leader in career and technical education (CTE) professional development, CTE secondary teacher, and school leader of new teacher programming

Grace Morgan. Grace worked as the district’s teaching and learning leader, which includes supporting each of the district’s five regions. She had a broad range of experience including school administration leadership, state level leadership, and classroom teaching. She also had earned her doctoral degree. She began her tenure in Pooley County Schools at the beginning of the current superintendent’s term two years ago. This was her third year in the district, and her previous work was located in central Tennessee.

Stella Harper. Stella worked as a Region A leader, overseeing six high schools, six middle schools, and eleven elementary schools. She had experience as an elementary school principal and teacher within Pooley County Schools. She has been in her role as a Region A leader two years ago when she transitioned from an elementary school principal to this role.

Jack Turner. Jack also worked as a Region A leader and supported the same schools as Stella Harper. Jack had a background as a principal in high schools and had experience as an athletic director and teacher in his career in Pooley County Schools. The 2024-2025 school year was his first year in the Region A leadership role.

Ingrid Blake. Ingrid worked as the district EPP leader and had experience working as a CTE teacher and leader of district CTE professional learning. The district EPP was designed for CTE teachers in Pooley County Schools and also serves 14 neighboring school districts. Thus, her teacher cohort in the district EPP not only included Pooley County Schools' job-embedded teachers, but it also served job-embedded teachers from 14 other school districts.

Principal Participants. Region A secondary school principal participants were a second part of my participant group since they have school-level input on the professional learning of job-embedded teachers. Using convenience sampling, I selected Region A secondary school leaders Region A has six secondary schools. I invited six principals to participate, and four principals agreed to participate in an interview. Table 3.3 describes the school leader participants.

Table 3.3

Principal Participants

Pseudonym	School name	Number of years at the school	Number of years in school administration
James Alden	Sawyer Hill High School	6	20
Ryan Walker	Murch Point Middle School	2	7
Dave Grant	Caldwell River Middle School	7	14
Evelyn Mercer	Lake Valley Middle School	1	9

James Alden. James had primarily worked in Pooley County Schools as a principal; however, he worked as a principal within a neighboring county for six years and he began his teaching career in another county within Tennessee. He served as the Sawyer Hill High School's principal for six years. He also had a doctoral degree.

Ryan Walker. Ryan was beginning his second year as principal at Murch Point Middle School, and this was his fourth year in the district. While he is originally from Tennessee, he worked for approximately twenty years in another state in special education and alternative school settings as both a teacher and principal.

Dave Grant. Dave had served as Caldwell River Middle School's principal for seven years. Prior to that, he served Pooley County Schools as an assistant principal and elementary school teacher. In particular, his elementary experience was in a very low socioeconomic school within Pooley County Schools.

Evelyn Mercer. Evelyn was beginning her first year as principal of Lake Valley Middle School. She had experience as an assistant principal and assistant administrator in secondary schools, and she served as an instructional coach and teacher.

Job-Embedded Teacher Participants

I included job-embedded teacher participants in this study. Convenience sampling allowed me to focus on the job-embedded teachers within Region A secondary schools. Since data was collected over the summer and thus could impact participation rates, inviting all job-embedded secondary teachers with Region A was designed to boost the response rate. I also collected teacher interview data in July and August when teachers were returning on contract to boost response rates. I emailed the job-embedded teachers in Region A secondary schools (see Appendix C), including a study information sheet (Appendix D), to invite them to participate in the study.

I invited 15 job-embedded teachers to participate in the study. Since the county did not have a readily accessible list of teachers who were participating in job-embedded EPPs, I asked principals in their interviews to identify job-embedded teachers in their schools. This helped me to only send recruitment emails to job-embedded teachers who were eligible for the study. I would have included more teachers, but not all teachers were fully hired. For example, one school was in the process of hiring two job-embedded teachers who needed to take their Praxis

exam. Thus, due to hiring constraints, I was unable to speak with teachers whose hiring process was not yet complete. Table 3.4 describes the job-embedded teacher participants.

Table 3.4

Job-Embedded Teacher Participants

Pseudonym	School name	Content area taught	Educator preparation program
Luke Harrison	Sawyer Hill High School	Business	District EPP
Chris Wells	Sawyer Hill High School	Special education	IHE-based EPP
Henry Rollins	Murch Point Middle School	College and Career Studies	District EPP
Valeria Barone	Murch Point Middle School	Special education	IHE-based EPP

Luke Harrison. Luke was a business and marketing job-embedded teacher with a wide range of experience including teaching overseas, business analytics, supply chain management, and consulting. He also served as an athletics coach at Sawyer Hill High School. He was in his first year of the district EPP for CTE teachers, but this was his second year teaching at Sawyer Hill High School.

Chris Wells. Chris was a special education job-embedded teacher at Sawyer Hill High School and enrolled in an IHE-based EPP. He had experience as a teaching assistant and substitute teacher at the same school. In his teaching assistant role, he primarily served the special education comprehensive development classroom (CDC), and as a result, he has used much of his job-embedded EPP time to learn about disabilities in the general education setting. Chris currently co-taught English language arts and math inclusion classes. Chris also served as a school athletics coach at Sawyer Hill High School.

Henry Rollins. Henry was a job-embedded teacher instructing college and career classes at Murch Point Middle School. He was enrolled in the district EPP for CTE teachers. Henry had a background in college admissions, financial aid, and school district federal grants. He had a unique perspective in that he was hired in January 2024, and since the district EPP does not allow for midyear enrollments, he began his district EPP in July 2024.

Valeria Barone. Valeria was a job-embedded special education teacher at Murch Point Middle School, and she was enrolled in the IHE-based EPP. Valeria had experience as a teaching assistant and substitute teacher at the main feeder school to Murch Point Middle School. This was Valeria's second year as a job-embedded special education teacher, and she currently taught sixth through eighth grade math, social skills, and assisted in the comprehensive development classroom (CDC) special education classroom, which was a self-contained classroom.

Data Collection

This study was based on an initial review of the Tennessee Education Research Alliance (TERA) annual Tennessee Educator Survey (TES) of teachers and school administrators; one of the survey sections addresses teacher preparation (Tennessee Department of Education, 2023a). However, TES data is only made available for public use if the response rate meets 45% for teachers and school administrators. Since Pooley County Schools' teacher and school administrator response rates were 37% and 34% respectively, the state did not release the county-specific data, and I was unable to use this data for an initial understanding of teacher perspectives specific to Pooley County Schools (Tennessee Department of Education, 2023a). While I could not use the TES county data, I was able to access the survey questions and include those within my research protocols based on the literature (Fink, 2017).

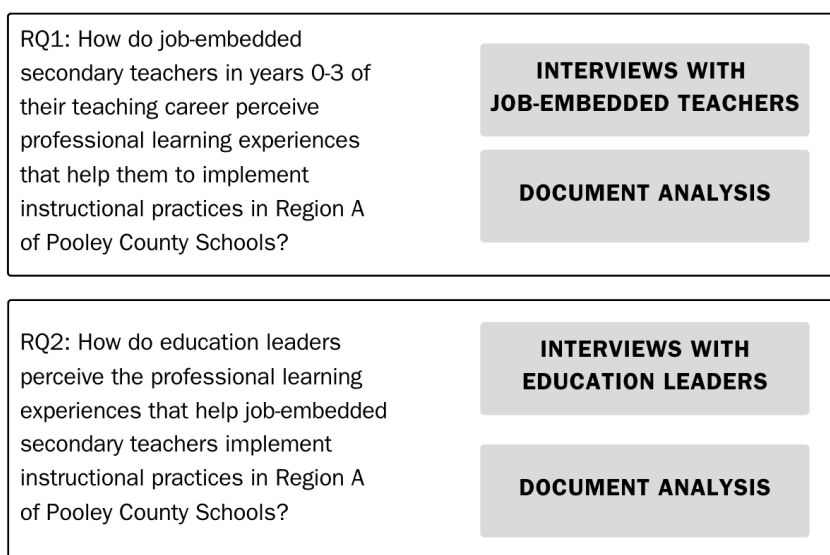
Specifically, the TES questions were branched based on experience, including a series of questions for early career teachers on how they felt their EPP prepared them to teach and questions around clinical, internship, and mentor experiences (Tennessee Department of

Education, 2023b). At the Tennessee state level, 80% of teacher participants reported that their clinical, field, and mentoring experiences prepared them for their current role, and approximately 50% reported that they received instructional coaching or professional learning aligned with their needs in their first year of teaching (Tennessee Department of Education, 2023a). However, the publicly reported data did not differentiate responses between traditional and non-traditional route teachers, which elevated the need for this study to better understand how job-embedded teachers perceived their professional learning experiences. Thus, my research design explored the perspectives of job-embedded teachers and education leaders to understand how best to help job-embedded teachers implement instructional practices.

Data collection was accomplished through a series of semi-structured interviews and document analysis. A summary of the methods and their alignment to the research questions can be found in Figure 3.4. Additionally, this study's design to interview multiple groups of people, including job-embedded teachers and education leaders, provided source triangulation.

Figure 3.4

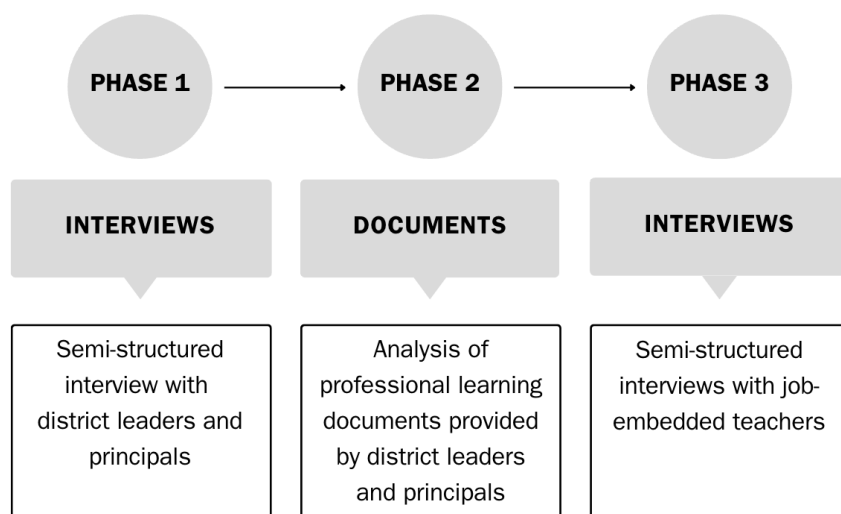
Research Questions and Methods Alignment



I conducted semi-structured interviews with the Pooley County Schools district leaders who oversee or were associated with job-embedded teachers, job-embedded teachers in Region A

secondary schools, and their principals. Documents were used to identify the types of professional learning offered to job-embedded teachers. The research trustworthiness was established by having coherence between the research questions, procedures, and “rigorous thinking” about “methods and analysis” (Patton, 2015, p. 703).

I selected four data sources for this study: three sets of semi-structured interview tools and one document tool. This allowed me to gather participant perspectives of professional learning that impacted job-embedded teachers’ instructional practice implementation. Semi-structured interview protocols were developed using the literature themes and my conceptual framework (Figure 1.2) to gather broad information about the perspectives of the district leaders, principals, and job-embedded teachers. The semi-structured interview protocols were researcher-developed using the literature themes from Chapter 2 and my conceptual framework in Chapter 1 (Figure 1.2). These protocols aimed to understand job-embedded teacher and education leader perspectives (Hatch, 2002). Three semi-structured interview protocols were developed to gather perspectives from three sources - district leaders (Appendix E), principals (see Appendix F), and job-embedded teachers (see Appendix G). I also developed a document analysis protocol (see Appendix H) to identify types, structures, and formats of professional learning experiences for job-embedded teachers. I have summarized the data collection phases in Figure 3.5.

Figure 3.5*Data Collection Phases****Phase 1: Semi-Structured Interviews of District Leaders and Principals***

Since Pooley County School is highly structured with regions, including Region leaders, principals, and teachers in a hierarchy, I felt that it was important to understand how the district leadership and Region A principals perceived professional learning aimed to support job-embedded teachers' learning instructional practices in comparison with what is perceived as occurring with job-embedded teachers. Using my literature review and Tennessee Educator Survey, I developed a semi-structured interview protocol for district leaders (Appendix E) and principals (Appendix F) to understand their perspectives (Tennessee Department of Education, 2023a). The data from these interviews were used to inform the job-embedded teacher interviews. Since the study design used semi-structured interviews, I asked follow-up questions that were aligned with the protocol.

Phase 2: Document Analysis of Job-Embedded Professional Learning

Concurrent with requesting interviews from principals, I requested documents that identified professional learning experiences specific to job-embedded teachers. I included this in one communication to district leaders and principals (Appendix C) to request documents and

participate in an interview. I selected this approach to gather documents from the district leaders and principals to gather a broad to narrow approach from district to school on document collection and analysis. Additionally, I selected this approach to boost the response rate and anticipate that not all district leaders or principals may be able to participate in an interview, but they may be able to provide me with documents.

The documents that detail professional learning experiences for job-embedded teachers included calendars, handbooks, and catalogs. A document analysis protocol is in Appendix H. The documents were primary sources that provided insights as to what principals believed was being offered to job-embedded teachers for professional learning. However, the semi-structured interviews in Phase 3 then allowed me to ask job-embedded teachers about the reality of those professional learning experiences and their perspectives of those experiences.

Through the document analysis process, I reviewed district and school-level documents to identify elements of professional learning tied to instruction. Table 3.5 provides a summary of the documents that I reviewed in this study and the organizational level that was affiliated with each document. When conducting interviews with district and school leaders, I requested that they send me any documents that were tied to instructional practice professional learning for job-embedded teacher candidates. Only one of these documents was strictly tied to job-embedded teachers (District EPP candidate clinical placement handbook), and the remaining were utilized with both job-embedded teachers and any other new teachers to the school or new teachers entering from traditional EPPs. Appendix J contains an excerpt of the document analysis.

Table 3.5*Documents Associated with Professional Learning in Instructional Practices*

Document	Organizational Affiliation
District learning days plan for 2024-2025	District: Pooley County Schools
New teacher scope and sequence	District: Pooley County Schools
New teacher mentor handbook	District: Pooley County Schools
District EPP candidate clinical placement handbook	District: Pooley County Schools
Programs for November 2023 district learning day English language arts Math Science Social studies	District: Pooley County Schools
Faculty induction handbook	School: Murch Point Middle School
New hire binder	School: Caldwell River Middle School

Phase 3: Semi-Structured Interviews of Selected Job-Embedded Teachers

After the district leaders' and principals' semi-structured interviews and document analysis concluded, semi-structured interviews of job-embedded teachers were conducted through a virtual meeting space, usually Zoom. I selected a virtual meeting to boost participation rates since some data was collected over the summer when participants were not in school, and if participants were in school, some worked at other schools than my own. However, if a participant wished to meet in-person, I would have scheduled a meeting place and time that would be most convenient for the participant. No participant requested an in-person interview. The interview questions were selected based on the research questions, literature, district leader interviews, and document data. The interview protocol can be found in Appendix G. These interviews provided information on the types of professional learning that job-embedded teachers engaged in within each Region A secondary schools, how job-embedded teachers prioritized their professional learning experiences, and what was effective and ineffective to help

them implement instructional practices. The interviews helped gather information around the interview data, build rapport, ask probing questions, and ask more detailed questions about the professional learning documents that I obtained (Hatch, 2002). The interviews were approximately thirty minutes in length, but I would permit them to go longer if the participant had more information to share.

Data Analysis

Researchers use case studies to learn knowledge about a particular situation and location to provide a greater depth of understanding of the problem (Hancock & Algozzine, 2017). As a participant-researcher, I was self-reflexive in my interviews to be representative of the participants while also maintaining a reflective journal to remove biases (Hatch, 2002). Since my problem of practice examined the perspectives of job-embedded teachers and education leaders on professional learning with emerging themes, I engaged in inductive analysis by finding patterns and themes in the data (Patton, 2015, p. 543). I purposefully used an emic focus on the participant's environment (Check & Schutt, 2012).

Next, I will explain my analysis process. I followed the steps of data analysis as described by Check and Schutt (2012): "1) Documentation of the data and the process of data collection, 2) Organization/categorization of the data into concepts, 3) Examining relationships to show how one concept may influence another, 4) Authenticating conclusions by evaluating alternative explanations, disconfirming evidence, and searching for negative cases, and 5) Reflexivity" (p. 7).

I documented the data and data collection by creating a data management plan (Appendix I) and folders on my computer for the data management file, interview transcripts, document cataloging and coding, and analytic memos. I recorded the interviews with Zoom or Teams, which recorded and transcribed voice to text and better facilitates the interview process. Then, I reviewed the transcript to check for errors in the transcription process. I entered the data into an Excel spreadsheet file to sort the transcripts according to the codes.

Phase 1: Semi-Structured Interview of District Leaders and Principals

I completed district leader and principal interviews using the semi-structured interview protocol in Appendix E and F, respectively. The interviews were recorded using Zoom or Teams which also provided a transcript of the recording. I then copied the transcript to Excel for coding purposes. Before my first round of coding, I made initial *a priori* codes (Table 3.6) using my research questions, the literature review, and the theoretical framework. This helped me to develop initial codes that I could then refine throughout the coding process.

Table 3.6

A Priori Codes

Topic from Conceptual Framework	Codes from the Literature Review
Adult learning features	Autonomy Individual reflection Facilitator supported Immediate use
Clinical approach	Aligned coursework to field experience Feedback provided Partnerships between EPP and field experience
Collaboration	Teacher-teacher collaboration Teacher-administrator collaboration Education leader importance PLCs
Education leaders' perspectives of job-embedded teachers	Positive perception by education leader Negative perception by education leader
Instructional Practice	Instructional Practice
Pedagogy and classroom management skills	Build pedagogical skills Policy and procedure knowledge Facilitate classroom management
Structure and format	Professional learning models Process for teacher changes to instructional practice Through mentoring or induction programs Embedded in the school day or PLC

This study's theoretical framework study was complexity theory professional learning model, and I developed coding to mirror the framework in the codes (Irby, 2013; Opfer & Pedder, 2011). I completed three rounds of coding. In the first round, I utilized the *a priori* codes to code the district leader interviews. In the second round, I added codes within a category to address areas of need that were identified by the district leaders' interviews. These category codes included topics such as district leaders perceiving that job-embedded teachers needed pedagogy, classroom management, evaluation understanding, and technology skills tied to instruction. I completed the third round of coding while completing the principal interviews. This allowed me to find commonalities between the district leaders and principals to ensure that the codes were appropriate for both sets of leaders. The codebook can be found in Appendix K, and an excerpt of coding can be found in Appendix L.

Phase 2: Document Analysis of Job-Embedded Professional Learning

I gathered documents from district leaders and principals that provided evidence of job-embedded teachers' professional learning to implement instructional practices. These documents included calendars, handbooks, and catalogs. Using the document analysis protocol (Appendix H), I identified the types of professional learning, structures, formats, and features. Then I was able to ask about these documents in Phase 3 semi-structured interviews of job-embedded teachers to understand how the documents were or were not used and how the documents may or may not have influenced job-embedded teachers' learning instructional practices.

Phase 3: Semi-Structured Interviews of Selected Job-Embedded Teachers

After completing the Phase 1 semi-structured interview with the district leaders and principals, I revised my codebook; it is placed in Appendix K. Then, I completed interviews of job-embedded teachers using the semi-structured interview protocols in Appendix G. I recorded the interview on Zoom or Teams which also provides a transcript of the recording. I copied the transcript to Excel for coding purposes. As described in phase 1 of this study, I completed three

rounds of coding based on revisions to my codes after completing the district leader and principal interviews. During the coding process, I maintained a reflective journal and wrote analytic memos to help me think about professional learning within my theoretical framework of complexity theory professional learning model (Opfer & Pedder, 2011). Samples of my reflective journal and memos can be found in Appendix M and N, respectively. The journal and memos helped me to understand the data and inform future interviews within this phase of the study.

Trustworthiness

I used strategies to increase validity and reduce potential bias and judgment since I am a practitioner-researcher based at a school within Region A. I maintained a research journal during the interview process to minimize bias. Furthermore, the semi-structured interviews provided participant responses that were detailed and descriptive and not interpretive. This study aligned the research questions, methods, and analysis to increase the trustworthiness of the findings and recommendations. I will now explain other ways in which I increased trustworthiness through the study design.

Triangulation

I used method and source triangulation to increase trustworthiness in this study (Carter et al., 2014). First, method triangulation allows the researcher to collect data about a particular topic from multiple sources (Carter et al., 2014). This study used interviews and documents to explore job-embedded teacher professional learning experiences. Documents, including District Learning Day catalogs, New Teacher Handbooks, and school-based new hire plans and programs, were used to provide another data source. I requested these items from district leaders and principals in my invitation for them to participate in the study. By exploring the topic of professional learning experiences from multiple sources, I increased the validity of the study (Carter et al., 2014). Second, source triangulation allows multiple groups of people to provide data in a study (Carter et al., 2014). This study interviewed multiple groups of people - district leaders, job-embedded teachers, and principals - to understand their perspectives of

professional learning. Thus, both method and source triangulation increased the trustworthiness of this study.

Reflexivity

Since I am a practitioner-researcher working in a Region A secondary school, it was important for me to be able to explain the decisions that I made throughout the study process, or an “audit trail” (Merriam & Tisdell, 2015, p. 252). I used a reflective journal to record my questions, decisions, and thinking around data, and I will write analytic memos to help me understand the interview data and the general findings that emerged (Merriam & Tisdell, 2015). These steps of a reflective journal and analytic memos helped me remain reflexive throughout the study.

Positionality

My position in this study is that I am a practitioner-researcher working as an administrator in one of the secondary schools within Region A. My role is multifaceted and includes facilitating PLCs, managing the new teacher induction program, serving as building testing coordinator, contributing to the school improvement plan, and providing thought partnership to teachers on instructional strategies. I have been in this role since July 2024 and have seen my responsibilities expand as I have gained experience, including student discipline, staff evaluations, and student support meetings. Prior to this role, I served as the school’s instructional coach for two years. Since I oversee the new teacher induction program, which also serves our job-embedded teachers, I used a reflective journal to question my potential biases. I addressed this within my analytic memos, especially within Murch Point Middle School responses, as this is the school in which I work.

I am also a member of the school administrative team which is composed of the principal, three assistant principals, and myself as an assistant administrator. I initiated this study while serving as the school’s instructional coach. Although my new administrator role now includes supervision responsibilities, teachers have consistently viewed me as an authoritative

figure within the school, even during my tenure as the instructional coach. Thus, job-embedded teachers may feel compelled to answer more positively due to my positive perception by the school's teachers. However, I believe this stems from the respect and trust I have built throughout my six years as the school's instructional coach and former classroom teacher. Furthermore, I serve on the school's improvement team which includes district leadership. This role has also developed the respect and trust of district leaders. I used my recruitment email (Appendix C) to identify that I am completing this study as a doctoral candidate rather than a specific school employee.

Ethical Considerations

It is my role as the researcher to maintain credibility and attend to ethical considerations throughout this study; while I employed methods that increase reliability, validity, and trustworthiness, it was ultimately my responsibility as the researcher to be credible (Merriam & Tisdell, 2015). This study used human participants, and thus I followed all IRS-SRS guidelines, including informed consent. All participants had a full explanation of the study before consenting to participate (Appendix D), and they could select to not participate if they did not wish to join the study. Additionally, as required by Pooley County Schools, all subjects, teachers, schools, and the system will be kept anonymous in any publication.

Participants provided consent in the semi-structured interview protocol. To protect participant confidentiality, participant data was collected using a data management system and organization system (Appendix I). An electronic filing system was created with a file for participant names, informed consent, and demographic information. That file was kept separate from the qualitative data collected from interviews. I used a numbering system to remove any identifying data from the interviews and used pseudonyms to ensure that confidentiality is maintained in the data analysis, findings, and discussion. All files were password-protected.

I followed Patton's (2015) Ethical Issues Checklist to be reflexive as a researcher and consider all possible ethical issues when creating this study. I will now explain how I have addressed those items in this study design.

In Chapter 1, I explained the rationale for the study, and that the outcomes of the study would be used to inform job-embedded professional learning experiences; this also addressed reciprocity in explaining the benefits of the study to the interviewees. Participation in the study may yield improved professional learning experiences for job-embedded teachers; however, I did not promise that changes or benefits may come from the study.

In Chapter 2, I explored the literature that informed this study, the overall problem of practice, and study design. This literature review was not exhaustive but informed the study and explored the relevant literature that was connected to this problem of practice involving professional learning for job-embedded teachers.

In Chapter 3, I explained the methods of this study which addressed informed consent, confidentiality, data access, and potential risks to participants. As explained, I created a data management plan to keep the study data secure and separate from identifying information to maintain the confidentiality of participants and their responses. There were no anticipated risks to the participants; however, if they became uncomfortable, they could stop their interview at any time. I looked to get responses to the interview questions, but I did not pursue an uncomfortable situation for the participants. If issues arose where I needed advice, I sought out support from my capstone committee chair; however, I did not encounter these situations in the study.

Delimitations and Limitations

Delimitations of this study were within the researcher's control and study design. One delimitation was the small sample size of four job-embedded teachers between two schools and eight education leaders. I selected this small sample because it represented the specific secondary schools in Region A where I was investigating the problem of practice. This study

could be improved by extending the data collection timeline to potentially increase the participants. However, since I did not intend to extrapolate the data beyond the research site, this delimitation did not pose an issue to the current study. Another delimitation was to only include job-embedded teachers. While professional learning may impact other subject areas, the specific nature of addressing professional learning perspectives of job-embedded teachers necessitated that I focus on job-embedded teachers for this study.

The limitations of the study were beyond my control as the researcher (McGregor, 2018). Limitations include self-reported data and transferability. The interviews within the study were self-reported and could be subject to participant perspectives. I used coding, category, and patterns in my data analysis to try to find themes without including potential bias. While future studies need to address whether this data can be generalized, this study focused on six middle and high schools in the same Region of a singular school district. Additionally, when able, I selected participants who were representative of the “maximum variation” in the sample to “allow for the possibility of a greater range of application (Merriam & Tisdell, 2015, p. 257). While the job-embedded teacher participant sample was small, they did represent three different content areas and both the district EPP and IHE-based EPP. So, issues with transferability were relatively small.

Conclusion

This chapter identified the methods that were used to understand the perspectives of job-embedded teachers and their education leaders of professional learning experiences for job-embedded teachers to implement instructional practices. This study used multiple sources and methods to triangulate the data. First, semi-structured interviews with district leaders were conducted to understand the broad and local context of job-embedded professional learning experiences. District leaders and principals were invited to participate in semi-structured interviews. In that invitation, these education leaders were asked to provide documents of their professional learning experiences for job-embedded teachers. Second, the documents were

used to determine what professional learning experiences existed, their structures, and formats. Third, semi-structured interviews with job-embedded teachers were conducted to reveal their perspectives. These interviews provided a thick, rich description of the individuals in this exploratory case study. I used qualitative coding methods to identify emergent themes and revise my codebook as I continued through the coding process. I adhered to the IRB-SRS guidelines throughout to maintain confidentiality and increase the trustworthiness of the study. The data and emergent themes from this study were developed into findings and recommendations in Chapters 4 and 5 of this study.

Chapter 4: Findings

This case study explored the perspectives of job-embedded teachers and their education leaders on professional learning provided to job-embedded teachers by Pooley County Schools and Region A secondary schools within the district. As defined in Chapter 1, job-embedded teachers are currently enrolled in educator preparation coursework while also working as teachers of record in Tennessee schools. The Tennessee Department of Education allows for these individuals to complete their coursework requirements while working as a teacher-of-record (Tennessee Department of Education, 2023c). The study explored the following research questions:

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?
- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

Education leaders in this study included district leaders and Region A secondary principals. I developed an understanding of the problem of practice using Opfer and Pedder's (2011) complexity theory professional learning model. This model identifies that understanding the multiple influences on teachers is critical to understanding teacher change (Opfer & Pedder, 2011). In regards to job-embedded teachers, this means it is important to understand influences of their content knowledge, work experiences, educator preparation program, and school and district professional learning (Opfer & Pedder, 2011).

To explore these two research questions, I developed a case study including interviews with four Pooley County Schools district leaders, four Region A secondary school principals, and four Region A secondary school job-embedded teachers. I also reviewed documents that were associated with teacher or job-embedded teacher professional learning; these documents

were provided by the district leaders and principals. Analyzing the interviews and documents generated three findings that align with my research questions and conceptual framework:

- Finding 1: District leaders, principals, and job-embedded teachers had similar perspectives on wanting more professional learning related to instructional practices, including assessment and classroom management.
 - Sub-finding 1.1: Job-embedded teachers, who previously worked as teaching assistants or substitutes, identified work experience as an advantage in understanding school functioning.
- Finding 2: District leaders, principals, and job-embedded teachers had differing perspectives on the sources of professional learning related to instructional practices for job-embedded teachers.
 - Sub-finding 2.1: Most district leaders and principals identified district-provided professional learning and instructional coaching as key sources of professional learning for job-embedded teachers to implement instructional practices.
 - Sub-finding 2.2: Most principals identified professional learning communities (PLCs) as a key source of professional learning for job-embedded teachers to implement instructional practices.
 - Sub-finding 2.3: Most job-embedded teachers identified informal teacher collaboration as the key source of professional learning to implement instructional practices.
- Finding 3: Some district leaders and most principals primarily attribute job-embedded teacher success in instructional practices to the individual teacher's character.
 - Sub-finding 3.1: District leaders and principals desire more knowledge and communication with job-embedded educator preparation programs to better support the success of job-embedded teachers.

Each finding and sub-finding that follows in this chapter has the research question(s) identified to show alignment; however, Figure 4.1 also provides a visual summary of the research questions and finding alignment.

Figure 4.1

Alignment of Research Questions to Findings and Sub-Findings

<p>RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?</p>	<p>FINDING 1 Needs of professional learning for job-embedded teachers SUB-FINDING 1.1 Benefits of job-embedded teachers' prior work experience in schools</p> <p>FINDING 2 Sources of professional learning for job-embedded teachers SUB-FINDING 2.3 Informal teacher collaboration was identified by job-embedded teachers as a source of professional learning</p>
<p>RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?</p>	<p>FINDING 1 Needs of professional learning for job-embedded teachers</p> <p>FINDING 2 Sources of professional learning for job-embedded teachers SUB-FINDING 2.1 District training and instructional coaching were identified by district leaders and principals as sources of professional learning for job-embedded teachers SUB-FINDING 2.2 PLCs were identified by principals as a source of professional learning for job-embedded teachers</p> <p>FINDING 3 Job-embedded teachers' success attributed to individual characteristics SUB-FINDING 3.1 Want increased information and communication with IHE-based EPP</p>

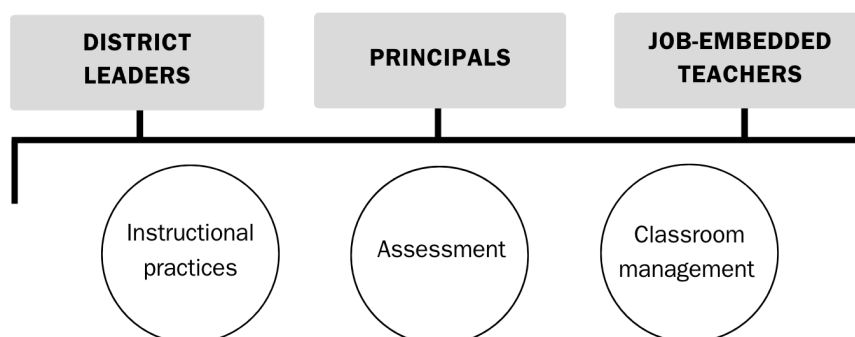
This chapter explains each of these findings and connects the data collected from interviews and documents to generate a discussion that is used to inform the commendations and recommendations in Chapter 5.

Finding 1: District leaders, principals, and job-embedded teachers had similar perspectives on wanting more professional learning in instructional practices, including assessment and classroom management.

This finding aligns with RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools? It also aligns with RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools? When district leaders, principals, and job-embedded teachers were asked about the types of professional learning they wish they had for job-embedded teachers to implement instructional practices, all participant groups identified instructional practices, assessment, and classroom management as areas. Figure 4.2 summarizes these commonalities, and the following sections describe each of these needs identified in Finding 1.

Figure 4.2

Similarities in Participant Groups' Perspectives of Job-Embedded Teacher Needs



Instructional Practices

All four district leaders shared that job-embedded teachers need instructional practice knowledge and more opportunities to engage in professional learning tied to instruction. Specifically, Grace Morgan, the district leader who oversees teaching and learning, related this need to overall and content-specific instruction to help job-embedded teachers teach effectively:

Job-embedded educators need to understand that there are high leverage, universal best practices. But then there are those content-specific ones. And, if we're not capitalizing on both, we might be missing something instructionally for kids. (Interview, line 50).

Also, Stella Harper, Region A leader, when asked about the priority professional learning needs of job-embedded teachers, shared that aside from classroom procedures learning for job-embedded teachers “there's also pedagogy and instruction” (Interview, line 50). Jack Turner, another leader in Region A, listed instructional practices as a priority item for job-embedded teachers within an instructional coaching or co-teaching model, including professional learning in “lesson structure and pacing,” “student engagement,” and “deep levels of questioning” (Interview, line 29). These remarks from district leadership show the district-level leader perspectives that job-embedded teachers need to learn instructional practices.

In comparison, the district EPP leader, Ingrid Blake, shared how her district-based EPP program requires teachers to complete EPP assignments that are immediately applicable to their classroom. Often, these activities are directly used with job-embedded teachers' students or in communication sent to parents. For example, Ingrid shared how her job-embedded teacher candidates utilize the same platform, Canvas, as their students use to allow them to “emulate that [platform] for their own classroom with their students” (Interview, line 16). More specifically, job-embedded teachers in the district-based EPP program complete assignments that are directly related to their daily work and are immediately applicable:

We [The district-EPP] hardly have them [job-embedded teachers] write papers about something that once done, they are stored elsewhere. We have them, rather, create classroom activities or lesson plans, unit plans, curriculum maps, syllabi, anything that they can actually turn around and teach or use in their classroom. And, then we ask them to bring back how it went, and we discuss outcomes (Interview, line 18).

Ingrid's description of her district-based EPP programming on instructional practices demonstrates highlights of adult learning including being facilitator supported, immediately applicable, and tied to teacher reflection (Irby, 2013; Knowles, 1980).

Furthermore, three of the four principals, James Alden, Ryan Walker, and Evelyn Mercer, identified instructional practices as a professional learning need of job-embedded teachers. While James did not outright state instructional practice, his remarks described it to support learning:

It's questioning, thinking and problem solving, and my teachers hear that 4,000 times a year: questioning, thinking, problem solving. And why is that? Because we're pushing top level kids; that's the way you push them is with the questions you ask and the thinking and problem-solving processes the kids have to go through to solve highly complex problems. So that's the goal. (Interview, line 27).

In this remark, James has stated key components of instructional practices based on this study's definition that is aligned with Darling-Hammond (2000).

Even job-embedded teachers described a desire to learn more content-specific instruction. Henry Rollins, Murch Point Middle School's college and career job-embedded teacher, shared that he would have appreciated a network of other college and career teachers to support him with instructional practices. Henry shared that:

No one in the school teaches college and career. I mean, so no one had done it beforehand, so there's not anybody to go to be like, hey, I'm having a problem with this

topic, you know, can you help me get through this? So, I mean, it's just something district wide [cohort] that would help a little bit more (Interview, line 68).

Henry shared that while the district-EPP was helpful, he would have liked a specific middle school cohort as support in his classroom and instruction.

Similarly, Valeria Barone and Chris Wells, two special education job-embedded teachers, described wanting to learn specific district curricula in ELA (Amplify) and math (iReady) in order to learn content specific instruction; however, they shared that special education trainings often conflicted with professional learning in ELA or math curriculum. Thus, Valeria and Chris felt that they were not able to receive all the professional learning necessary around instructional practices tied to pedagogy. For example, Chris shared that:

I think that the conflict that we run into being in special education is we end up going to our [training] all separate and people have different areas, so I would have to do the training for special education, and I would miss out on being able to go to the training for math (Interview, line 32).

Chris went on to explain that he received most of his learning “on the fly as opposed to getting proper training for that particular math or English content area” (Interview, line 32). These job-embedded teachers wanted more instructional practices learning, but they identified barriers to accessing those activities.

Assessment

Assessment appeared to be of more importance to district leaders as compared to job-embedded teachers. For example, Grace, Stella, and Jack all described how formative and summative assessments inform instruction. Stella shared that job-embedded teachers come from other fields and the idea of assessment for understanding may be completely new to them:

I could see [a need for job-embedded teachers in] being able to utilize assessment to adjust instruction based on formative assessment because we don't typically see that in

a lot of other fields. I think that's just something that people don't really recognize as necessary through teaching until you're in it and you really learn it (Interview, line 74).

Grace emphasized the need for assessment even more in her statement:

They [job-embedded teachers] need to understand that assessment means so much more than just those summative assessments at the end of a unit, or at the end of the year. Assessment is an indicator of what students know. But it's not a final marker of where students can be, and so I think that assessment is a huge piece of learning that our job-embedded educators need to focus on (Interview, line 48).

It is notable that one of the four principals, James Alden, felt that job-embedded teachers needed to know “how to use formative [assessment] before I start on this instructional technique” because this statement explicitly connects assessment to instructional decisions (Interview, line 27). In these interview responses, participants identify how assessment plays a role in making instructional decisions.

Classroom Management

Every participant group - district leader, principal, and job-embedded teachers - described needing professional learning in classroom management as a conduit for implementing effective instruction. However, classroom management was identified more by district leaders and principals as compared to job-embedded teachers. Notably, all eight of the district leaders and principals interviewed in this study identified classroom management as a professional learning topic needed for job-embedded teachers to implement instruction. While I continued to follow the semi-structured interview protocol which focused on instructional practices, education leaders consistently emphasized that effective classroom management was integral to implementing instructional practices.

Furthermore, some participants identified classroom procedures as a subset of classroom management that is necessary for implementing instructional practices effectively. In this study, participants referred to classroom procedures as routines that allowed students to

know what is expected of them and how to perform regular classroom tasks. Participants described how establishing classroom procedures assisted in classroom management to create a positive learning environment. Thus, this finding was created from participant responses that included both components: classroom management and classroom procedures.

Each of the district leaders discussed how classroom management can effectively support instructional delivery. For example, Grace Morgan stated:

I also think that one of the other factors...is this idea that building a classroom ecosystem is essential in really thinking through how to get kids to learn. If you can't establish rapport with students, if you can't establish common ground and norms with kids, and lay out expectations for learning, you're limiting what can happen in the classroom (Interview, line 53).

Furthermore, Grace continued in her interview that developing a classroom “ecosystem” may be more foreign to a job-embedded teacher who is entering the profession from another field of work (Interview, line 53). So, her remarks suggest that she deems developing classroom procedures essential to delivering instruction.

Stella shared a similar statement, identifying that job-embedded teachers may be challenged “to work through those discipline issues as they arise and also manage how a classroom needs to run” (Interview, line 46). However, when asked to select her priority professional learning experiences for job-embedded teachers, Stella does continue to clarify her perspective on management and discipline by defining those two concepts:

I see classroom management and discipline as somewhat separate because I think there is a procedure part of classroom management and then being able to de-escalate the students and work through student-specific issues (Interview, line 72).

In her remarks, Stella seems to suggest that effective content delivery relies on a well-managed classroom.

Similarly, Jack Turner felt that classroom management was a part of learning the teaching profession. However, he identified that he knew more about classroom management professional learning from the district-based EPP than the IHE-based EPP. When asked his thoughts on the needs of job-embedded teachers in either program, Jack shared that the district-based EPP “runs the gamut from classroom management to some instructional practices” (Interview, line 19). Jack’s perspective appeared to be confirmed by those of Ingrid Blake, the district-based EPP leader, when she outlined the difference between job-embedded teachers in year one as compared to year two of her program:

And with the very new teachers [our observations and feedback are] often centered around classroom management, in my second year [cohort] we go a little bit. It goes automatically a little bit further into instructional strategies because they are realizing if I can keep them [students] engaged, I also don’t have to manage too much (Interview, line 25).

In summary, Jack and Ingrid identified that classroom management is a part of the district-based EPP; however, none of the district leaders identified classroom management as a part of the IHE-based EPP. This could be because the IHE-based EPP curriculum does not include classroom management, or it might be simply due to the leader lacking familiarity with the IHE-based curriculum.

Interviews with all four principals highlighted that classroom management is an essential component of job-embedded professional learning. Like Stella’s observations, James Alden, principal of Sawyer Hill High School, noted that job-embedded teachers need to develop these skills because they often come from backgrounds unfamiliar with schools and their structures. James shared that “the biggest challenge any job-embedded teacher is going to have is classroom management right off the bat” (Interview, line 12). Yet, James qualifies this statement by adding that job-embedded teachers need to know “how do I engage students for a certain period of time at the right level?” (Interview, line 13). James appears to suggest that effective

classroom management is crucial for delivering content in a way that engages students and is of appropriate rigor.

Similarly, Ryan Walker, principal of Murch Point Middle School, was direct in stating “if you can’t manage your classroom, then it doesn’t matter how well you can teach” (Interview, line 105). Ryan provided an example of an auto shop teacher who worked at Ryan’s former school. Ryan shared that while the teacher was tremendously skilled at his content, he lacked classroom management skills. Essentially, Ryan conveyed that instruction is important; however, he felt that teachers need to have a classroom environment that is conducive to learning.

Additionally, Dave Grant, principal of Caldwell River Middle School, had similar feelings as James and Ryan. Dave stated, “If they [teachers] cannot manage students, if they [teachers] cannot relate to students, then they cannot be successful” (Interview, line 18). Dave went on to say that the lack of classroom management impacts the school and students:

Educators who come out of those programs [who are] not willing or not able to work with challenging students, it’s just not worth it. It becomes a stress on the school. It’s a stress on their colleagues. It’s a stress on the students and the families (Interview, line 16).

Dave’s responses align classroom management with a well-functioning classroom, school, and faculty.

However, Dave recognized this need and shared how his school’s new teacher mentoring program helps teachers think about classroom setup and organization for teachers to “have your classroom set up” and have in their mind “at least what structures and routines look like” (Interview, line 24). While Dave identified a strong connection between classroom structure and instruction, he has addressed this through the school mentoring program. Furthermore, in analyzing documents for this study, Caldwell River Middle School provided a New to Caldwell River Binder, but it did not contain information about classroom setup or routines (Document, New to Caldwell River Binder). While this may demonstrate a lack of alignment, it could also

mean that learning to set up a classroom is provided to new teachers through a different context, including informal conversations with their mentor teachers which is not included in the documents shared with this study.

Also, Evelyn Mercer, principal of Lake Valley Middle School, shared similar feelings with her statement, “I've seen kind of a big need [for job-embedded teachers] in classroom management” (Interview, line 17). However, when asked to prioritize her top three job-embedded professional learning activities, she did not include classroom management. Instead, Evelyn selected PLCs, mentoring, and learning the educational “jargon” of school (Interview, line 30). So, while Evelyn values classroom management, it is notable that she does not identify it as a top priority. Rather, she may view it as part of the other professional learning activities.

In comparison, only one of the four job-embedded teachers, Henry Rollins, identified learning about classroom management as a helpful experience to his teaching practice. Henry described this learning opportunity as part of a school-based observation in which Henry observed two other teachers as part of the school faculty induction program (Interview, line 30). In comparison with documents in this study, Murch Point Middle School includes a classroom observation program (3 visits/year) for any new teacher to observe other classes in the school (Document, Faculty Induction Handbook). Henry shared how he was able to observe some classroom routines in practice in an English language arts classroom:

I kind of learned, you know, I really looked at her from more classroom management...in her [the ELA teacher's] class, they're snapping and they're stomping. I thought that was fantastic, just as a way to get their attention and everything (Interview, line 30).

Henry identified a teacher who was using a routine to engage students with the learning.

Sub-finding 1.1 Job-embedded teachers, who previously worked as teaching assistants or substitutes, identified that work experience as an advantage in understanding school functioning.

Teaching assistants provide support to classroom teachers and students by assisting with classroom management and individual student support under the oversight of a classroom teacher. Job-embedded teachers begin instruction with students without necessarily having experience in a school setting. While some job-embedded teachers may have worked as teaching assistants or substitutes, not all job-embedded teachers have had that experience. This sub-finding aligns with RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?

For example, two of the four job-embedded teachers interviewed had experience as a teaching assistant and/or substitute teacher before working as a job-embedded teacher. Valeria Barone, a special education job-embedded teacher at Murch Point Middle School, had previously worked as a teaching assistant and substitute teacher. She stated that those experiences had helped her to acclimate to the school environment more quickly:

I had the advantage of a little bit of background, not strictly the school, but the school atmosphere. But as far as the job is embedded, it was sink or swim. Here you go.

(Interview, line 39).

Based on this comment, Valeria appeared more comfortable with school and school procedures due to her teaching assistant and substitute teacher background, but she felt uncomfortable with her job-embedded teaching role. In this statement and a subsequent statement, it would appear that Valeria felt like she saw different classroom management styles as a teaching assistant and substitute, but she did not connect any of her prior work experience to instruction:

As far as behavior management in the classroom, it doesn't seem like there is a universal method to any of it. Each teacher is different. Each group of kids is different. So, it's been different everywhere; every classroom I've been in (Interview, line 41).

While Valeria seemed comfortable understanding classroom procedures, she did not describe any of her instructional practices' knowledge from those teaching assistant and substitute experiences.

Similar to Valeria, Chris Wells, special education job-embedded teacher at Sawyer Hill High School, attributed some of his teaching assistant experience as impactful to his current job-embedded teaching role. As a teaching assistant, Chris worked in inclusion classrooms to assist the classroom teacher and students. An inclusion classroom is one in which special education students receive instruction alongside their general education peers. Typically, a special education teacher or teaching assistant will be in the classroom to support both the special education students and general education students. Chris described what he learned from that experience:

What really helped me was kind of finding the ways to get to those [special education] students where I didn't have much experience with, and I didn't have as much knowledge going...before my [EPP] classes kicked in to know how to approach those [special education] students in the classroom (Interview, line 15).

Chris' reflections revolved around understanding his former students as a teaching assistant rather than his current students as a job-embedded teacher.

While Chris stated that working with special education students as a teaching assistant was helpful, he felt a lack of "knowledge" before beginning in his EPP coursework (Interview, line 15). This may be a similar feeling as already described in Valeria's interview when she said it was "sink or swim" (line 39). The two job-embedded teacher responses highlight understanding school function based on their prior work experience; however, they also both emphasize a lack of knowledge about actual instructional practices.

Summary of Finding 1

Based on the data presented in Finding 1, there appear to be strong similarities in responses between all three participant groups - district leaders, principals, and job-embedded teachers. These commonalities highlight specific needs in instructional practices, including assessment and classroom management. This agreement on the needs of job-embedded teachers could create an opportunity for improvement and collaboration in addressing these needs.

Notably, principals tended to identify classroom management as needed more often than instructional practices compared to job-embedded teachers. This may be due to the principal's responsibility to maintain a safe and secure environment. Given the paramount nature of school safety, it may be understandable that a principal is more focused on classroom management than instructional practice. However, many of the principals interviewed also discussed effective instructional practices as an outcome of strong classroom management. In other words, principals tended to view instructional practices that engaged students in learning as a natural part of successful classroom management. Principals appeared to feel that well-managed classrooms yielded the opportunity for instructional practices to be more effective in impacting student learning.

Finding 2: District leaders, principals, and job-embedded teachers had differing perspectives on the sources of professional learning related to instructional practices for job-embedded teachers.

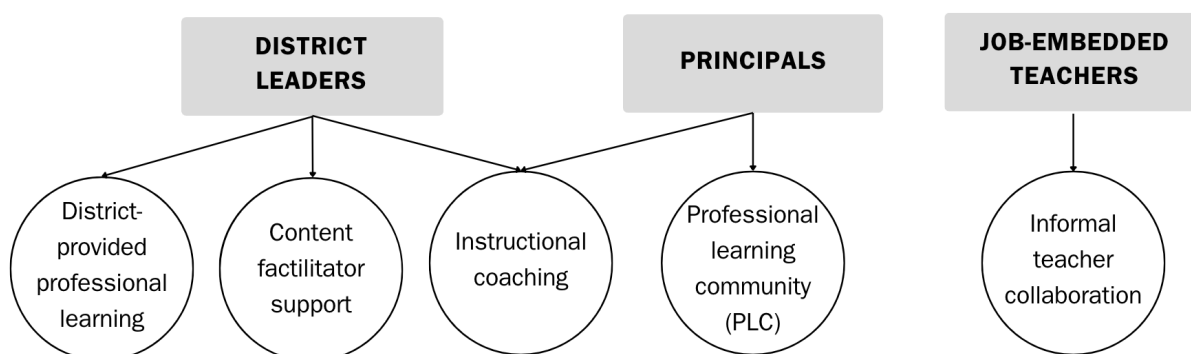
This finding aligns with RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools? This finding also aligns with RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County

Schools? This finding addresses both RQs since differing perspectives were uncovered in the data collection and analysis process.

When asked about the professional learning experiences provided to job-embedded teachers, district leaders described two activities: district-provided professional learning and instructional coaching. Principals described instructional coaching and professional learning communities (PLCs) as sources of professional learning. When asked the same question, job-embedded teachers described informal teacher collaboration. Figure 4.3 summarizes the participant perspectives as an overview before detailing Finding 2. The following sections describe each of these types of activities identified in Finding 2.

Figure 4.3

Differences in Participant Perspectives of Professional Learning Sources



Differences identified by Participant Groups

Compared to job-embedded teachers, district leaders and principals had different perspectives of the sources of professional learning related to instructional practices. In particular, district leaders identified professional learning sources through content facilitators and District Learning Days. Content facilitators are specialized in specific areas (e.g. math, science, special education, etc.) and are assigned to one of the five regions in Pooley County Schools. Content facilitators specifically serve the schools within a region. For example, Region A, which is the focus of this study, has content facilitators in English language arts, math,

science, social studies, ELL, and special education. District Learning Days are full days in which students have a holiday and teachers receive training either at the district or school level. Often, content areas across the district meet at one school in the district to receive content-specific training. For example, all secondary science teachers in the district may meet at Sawyer Hill High School for a half-day or full-day professional learning (Document, Programs for November 2023 District Learning Day.)

When participant groups were asked about the source of professional learning in instructional practices, most did not identify the same sources. For example, Grace Morgan, who oversees teaching and instruction in the district, identified District Learning Day as a place where there were “generally sessions geared toward people who are job-embedded” (Interview, line 75). However, only one of the four District Learning Day program catalogs identified a session for new teachers (Document, Social Studies Program for November 2023 District Learning Day). Furthermore, the program did not identify a session specifically geared towards job-embedded teachers; it only identified new teachers (Social Studies Program for November 2023 District Learning Day). Session presenters may have had components of their presentations geared towards job-embedded teachers, but that was not evident in the program descriptions.

Additionally, district leaders and principals identified instructional coaching as a means of educating job-embedded teachers in instructional practices. Interestingly, the district leaders who mentioned instructional coaching in their interviews had a unique perspective shaped by their own job experiences. For example, Jack Turner, who is a Region A leader, was new in his role this school year. Last spring, he worked as a secondary school principal in the district. Jack felt strongly about job-embedded teachers needing tiered instructional coaching embedded into their schedules. Jack explained his thoughts with the following statement:

Very frequent [instructional coaching], and that might be some kind of tiered approach.

The first 30 days X number of times 60, [then] 90 days. So, I think really intense

instructional coaching [is needed for job-embedded teachers]. Then that would bleed into some real time coaching (Interview, line 29).

Jack continued to share that in his former school where he served as principal, he used coaching with one of his job-embedded teachers (Interview, line 33). In these examples, Jack identified that instructional coaching is necessary for job-embedded teachers.

Additionally, Ingrid Blake, the district-based EPP supervisor, identified instructional coaching as a key component of her program. Ingrid shared that she participates in coaching cycles with her job-embedded teachers which include classroom observation, reflection, and feedback given to the job-embedded teacher (Interview, line 25). Together, they identify an area for growth in which the job-embedded teacher can improve instructional practice before the next observation (Interview, line 25). While Ingrid did not have principal experience that Jack had, she did have a direct connection to the classroom due to her regular classroom observations.

In agreement with Jack and Ingrid, the principal of Sawyer Hill High School, James Alden, identified the school's "hefty instructional coaching program" as a means of delivering professional learning to job-embedded teachers or any teacher needing support (Interview, line 25). James shared that providing professional learning to teachers in-house was important to him before utilizing district resources (Interview, line 25). These interviews highlight that district leaders and principals have a shared reliance on instructional coaching. However, the district leaders, Jack and Ingrid, who identified instructional coaching may have a more direct link to the classroom since one was a recent principal and the other currently provides instructional coaching to district-based EPP job-embedded teachers.

The next portion of Finding 2 identifies three sub-findings that address how each participant group - district leaders, principals, and job-embedded teachers - had different perspectives of professional learning sources of instructional practices. These are described as sub-findings since they relate to RQ1 and RQ2 and give further details about the commonalities

within participant groups and differences between participant groups. I have identified which sub-finding aligns with each RQ.

Sub-finding 2.1: Most district leaders and principals identified district-provided professional learning and instructional coaching as key sources of professional learning for job-embedded teachers to implement instructional practices.

While the definition of instructional coaching varied between participants to include coaching cycles, observations, informal feedback, and co-teaching, the topic of instructional coaching frequently arose in the interviews. This sub-finding relates to Finding 2 and RQ2 by clarifying the specific types of professional learning experiences identified by district leaders and principals.

District-Provided Professional Learning. District professional learning for job-embedded teachers in instructional practice was not uniformly reported in the interviews. Most of the interview data pointed to school-level supports; however, the responses that identified district-provided professional learning are notable as they may indicate a broader trend to be explored. These responses are explained in this subheading. Through the interview and document analysis, data revealed opportunities for procedural and instructional practices training, yet frequency, alignment, and accessibility may be an issue for teachers.

Grace and Stella, two district leader participants, identified District Learning Day as an opportunity for job-embedded teachers to learn instructional practices. However, both raised concerns about the format of those professional learning days. One leader identified that the conference-style format allowed teachers to be autonomous in session selection. In her interview, Grace shared the following highlights and concerns of district learning day:

We have District Learning Day. Our goal is to always have a session geared toward that population [job-embedded] of educator, and then specifically, in our secondary spaces, that academic facilitator is there to support one-on-one teacher needs...I think anytime you have a large-scale conference style, professional development that is solely driven

by educator choice, there's value in allowing that autonomy for educators to have some decision-making and what they feel they need. But I also think there's a layer of sometimes you don't know what you don't know. And, as an educator in that job-embedded pathway, I think that there are specific things that we need to support their knowledge on, and other things that should be choice-driven (Interview, line 126-131).

In her statement, Grace acknowledged that autonomy is part of adult learning, but job-embedded teachers may not have the full teaching knowledge to effectively select the best learning session for them to improve instructional practices.

In an interview with Stella, she also acknowledged that District Learning Day can provide instructional practice training. She had limited knowledge of what occurred at those sessions, and she had concerns about overall attendance from any teacher:

We have our District Learning Days that I do think. When people go, I think that we have good opportunities, and we have a lot of opportunities for all teachers, but nothing necessarily specific to job-embedded. But I think that many teachers could get what they needed, whether their job-embedded or not. If they took advantage of the opportunities that were out there for them, but nothing specific to that [job-embedded] group as far as I know (Interview, line 82).

Stella acknowledged that there are District Learning Day opportunities, but she also identified that those opportunities are not likely to be specialized for job-embedded teachers.

Furthermore, she reiterated a similar sentiment that Grace had in which teachers can get a variety out of professional learning, but she identified that self-efficacy is a part of that process.

Stella felt that teachers only get out what they put into selecting and participating in professional learning activities.

Confirming these sentiments were the document analysis and job-embedded teacher interviews. I reviewed the District Learning Day program sessions for English language arts, math, science, and social studies from November 2023 to identify if there were specific job-

embedded teacher programming. Of the four content areas, only social studies had a session titled: “New to PCS⁴ or New to Teaching Social Studies?” (Document, Social Studies Program for November 2023 District Learning Day). While Grace and Stella, district leaders, identified District Learning Days as a means of job-embedded teachers obtaining professional learning on instructional practices, none of the District Learning Day program sessions identified a specific audience or identified a grade band of teachers (ex. Grades 6-12) aside from the social studies session already described. This may have contributed to the statement from Grace who identified that autonomy in session choices, particularly for job-embedded teachers, may create a situation in which they are not receiving the learning they need to be effective teachers (Interview, line 126-131).

Furthermore, the district’s newly revamped New Teacher Experience, in which professional learning is scheduled throughout the year and more detailed, has formalized the onboarding process to be more transparent and embedded; however, the program does not explicitly provide for content instructional practices (Document, New Teacher Scope and Sequence). Rather, it identifies that content supervisors and facilitators will provide professional learning on instructional practices throughout the year (Document, New Teacher Scope and Sequence).

Also, district leaders and principals did not identify the New Teacher Experience as a support for professional learning (Document, New Teacher Scope and Sequence). However, since the New Teacher Experience has been revised this school year, it may be that district leaders and principals were less familiar with it, and thus did not identify it in their interviews. It may also reveal an opportunity for offices that support district learning and hiring may increase their partnership and increase the likelihood that district leaders and principals identify the New Teacher Experience as a means of professional learning for new teachers.

⁴ Pseudonym used for Pooley County Schools as PCS. The document cited used the district three letter acronym, and thus, the substitution here.

Instructional Coaching. District leaders and principals identified instructional coaching as a source of professional learning of instructional practices. For example, three of the four district leaders identified instructional coaching as contributing to job-embedded teachers learning instructional practices or should be more strongly pursued as a means to provide professional learning to job-embedded teachers. In the district EPP cohort, Ingrid Blake described the structure of coaching that her job-embedded CTE teachers receive:

We have a very strong coaching component. When I go out to do coaching visits and those are non formal evaluations, they are also supposed to be just edifying, not evaluative. They already get those from their schools. So, when I come in for a coaching visit, I have a tool that I use...We meet a day later or so for a virtual follow up session and I coach the candidate through a conversation of how they felt the lesson went. Have they reached their goal of reaching the students? How do they measure mastery of the kids? Have they? Are they ready to move on and what tweaks need to be made? So, we discussed the lesson, but then we also set goals. Usually, we pick one most glaring thing that if we change that we get the biggest bang for our buck. And, with the very new teachers often centered around classroom management. In the second year, we go a little bit further into instructional strategies because they are realizing if I can keep them engaged, I also don't have to manage too much. So, it's supposed to be a clinical cycle for the coaching. We set goals, we come back to those the next time. How are we doing? Are we making progress? What do I see now in the classroom happening? And if we've achieved that goal and we want to move on to something else, we focus on something else or keep fostering that one piece (Interview, line 25).

In other interviews with district leaders, they identified the need for instructional coaching, but they did not provide the same level of details as Ingrid. For example, Grace Morgan shared that embedded instructional coaching would be a helpful activity for job-embedded teachers:

If I had an ideal world, we would have enough instructional coaches to truly do instructional coaching cycles that would be driven by specific individual teacher needs because that is what I feel would be most effective (Interview, line 95).

Furthermore, Jack Turner, Region A leader, provided an example of when he employed instructional coaching as a principal:

We did some real time coaching at Franklin High School⁵ last year. Towards the end of the year, and I loved and felt like it was a really positive thing. Teachers get a little antsy when you start doing that. I think sometimes with these EPP candidates, they don't know the difference. They don't. So, to me, the power of real time coaching is for them [teachers] to practice teacher moves in the moment. Not hey, I'm going to observe you, and then we'll talk in three or four days about what I saw. Like real-time coaching, small bites of information (Interview, line 29).

Jack saw the value in instructional coaching to support all teachers, and especially job-embedded teachers with immediate feedback and implementation.

From a school level, two out of the four principals identified instructional coaching as a key lever for job-embedded teachers' professional learning. For example, Sawyer Hill High School's principal, James Alden, shared that his school has a strong instructional coaching program that he favors over district support when developing job-embedded teacher practices:

[We do not use facilitators] necessarily for the EPP candidates. I mean, we might use them for what they might be used for, EPP or job-embedded candidates, but they may also be used for a traditional candidate. That's their first, second, third year in the profession, but we will use them for any candidate that we deem is underperforming in the classroom to aid that. But we have a pretty hefty instructional coaching program here

⁵ Pseudonym for another school in Pooley County Schools that is not in Region A.

in instructional support that we make sure that we try to get before it gets to that point we try to do everything in-house (Interview, line 25).

Essentially, James reserves the district content facilitator support for teachers deemed not making adequate progress or underperforming.

Evelyn Mercer, principal of Lake Valley Middle School, described the TEAM/TIGER evaluation process as a way for job-embedded teachers to receive professional learning. Pooley County Schools uses the TIGER evaluation model using the TEAM rubric to evaluate teachers (Tennessee Department of Education, 2018). This is utilized annually to evaluate all faculty and has a built-in coaching feature specifically for new teachers:

So, you know, all of those EPP employees, if they're in their first year of stage one teachers, and so they have a lead admin, and then they also have a coach. They're receiving feedback throughout the year through the TEAM lens basically.

While this is not an example of formal instructional coaching, Evelyn described a process in the Tennessee evaluation system in which new teachers receive a mentor to meet with them regularly and observe their classroom to provide feedback.

Lastly, the job-embedded teachers identified learning instructional practices through instructional coaching. However, not all teachers described coaching as something they had experienced; some described coaching as something they would like to experience. This is promising as it shows alignment between the education leaders and the job-embedded teachers. For example, Henry Rollins, Murch Point Middle School college and career teacher, felt that instructional coaching helped him have a basic understanding of the classroom. Henry shared that having instructional coaching connected through the school directly was critical for his success:

Working with you [the instructional coach], honestly, has been one of the biggest helps because you [the instructional coach] helped me more understand how to kind of flow

my classes and actually set up with the standards. So that was a really big help right off the bat (Interview, line 30).

Similarly, Luke shared that he would have liked more instructional coaching to be asked why he was making certain instructional decisions and then obtain feedback from the visits:

I kind of wish, if administrators [principals], or my peers or even, a senior, a student who the administration trusts or something...I wish I had been observed more often and that people had challenged me more, you know, like, hey, why did you do the thing like that or what? What do you expect is going to happen? Or, how come you only have one big project at the end of the year? Do you really think that's the best way to test their knowledge? (Interview, line 40).

In this thought, Luke suggested that he wanted more instructional coaching but appears to have not received it. However, he taught at the same school as James Alden, who stated that they have a strong instructional coaching program. So, it is unclear if Luke received coaching and did not recall, or if principal James Alden did not deem Luke as needing coaching. Nevertheless, both the principal, James, and the teacher, Luke, appear to emphasize instructional coaching as a means of providing professional learning in instructional practices to job-embedded teachers.

Content Facilitator Support. District leaders also identified content facilitator support as a means of instructional practice learning for job-embedded teachers. Specifically, they were identified as a means of district content facilitator delivery of professional learning. In Grace's interview, she shared the following:

When we think about facilitator support and the fact that the majority of them have approximately 20 schools to support, the frequency at which they're able to support at the PLC level is probably twice a month. So, if you think about that, that's 2 times a month, 10 months in a school year, 20 times a year. I think the ability to do one-on-one support is less than that (Interview, line 126-132).

Based on Grace's remarks, while district content facilitators supported the PLC, the frequency with which they can do job-embedded coaching is much smaller. While this study did not explore the time that job-embedded teachers need for professional learning tied to instructional practices, this statement identifies that district-based support from content facilitators may come through a PLC.

Sub-finding 2.2: Most principals identified professional learning communities (PLCs) as a key source of professional learning for job-embedded teachers to implement instructional practices.

The importance of the professional learning community (PLC) was reinforced throughout two levels of interviews - district leader and principal interviews. Before exploring the connection of PLC with job-embedded teacher professional learning on instructional practices, I will first revisit the PLC definition. DuFour (2004) identified that the PLC's purpose is to collaborate around student learning and outcomes which can be informed by student assessment, advanced pedagogical knowledge, and innovative instructional practices. This sub-finding aligns with RQ2 since it explains an education leaders' perspective. I will revisit this definition and its impact on job-embedded teachers' professional learning in Chapter 5.

Professional Learning Communities (PLC). School leaders identified PLCs as providing instructional practice professional learning to job-embedded teachers. For example, principal, Ryan Walker, shared that job-embedded teachers' instructional practice professional learning should be prioritized through PLCs as the third layer, "pacing and PLCs are that 3rd layer of support" (Interview, line 101). Furthermore, Caldwell River Middle School's principal, Dave Grant, identified PLCs as a means of support, but he highlighted that the support is dependent on the PLC's effectiveness:

The PLC [needs to] make sure that they are working effectively to help that teacher walk through the planning process and understand the content and what students need to obtain mastery of the material (Interview, line 30).

This again emphasizes the PLC to meet the original intent of the structure as defined by DuFour, but some principals also view PLCs as structures to train job-embedded teachers in instructional practices. Additionally, Evelyn Mercer, principal of Lake Valley Middle School, shared that most content pedagogy is delivered through the PLC structure:

I definitely think that PLC is probably the main area where they receive that [content-specific pedagogy]. I think we occasionally have department chair meetings and District Learning Days (Interview, line 26).

This remark suggests that the PLC is utilized as a content pedagogy professional learning activity in this school, and based on the remarks of Ryan and Dave, many schools appear to be using the PLC structure as a delivery system of professional learning in instructional practices.

Sub-finding 2.3: Most job-embedded teachers identified informal teacher collaboration as the key source of professional learning to implement instructional practices.

This sub-finding identifies the primary source named by teachers in their interviews - informal teacher collaboration. Job-embedded teachers identified a different source for their professional learning compared to principals and district leaders. This sub-finding aligns with RQ1 since it relates to job-embedded teachers' perspectives.

Informal Teacher Collaboration. Job-embedded teachers did not identify PLCs as a means of obtaining professional learning in instructional practices; however, they did describe informal teacher collaboration which I will explore in this section. While the job-embedded teachers did not name these informal teacher collaboration activities as part of a PLC, based on the interview responses, these teacher-teacher collaborative moments may have been part of a PLC or between two teachers who are in a PLC. For example, Sawyer Hill High School teacher, Luke Harrison described visiting teachers' classrooms and asking questions about their instructional choices:

I just kind of throw my situations and my questions at them [his teacher peers] and they bounce and give me feedback, and then that afternoon I've put it straight back into the

classroom. So that's been really helpful. It's just having that peer group who's more experienced in this kind of formal educational setting (Interview, line 19).

In this example, Luke developed an informal collegial relationship with his peers to obtain feedback and improve his instructional practice.

Additionally, Murch Point Middle School special education teacher, Valeria Barone, spoke about learning from her peers and being supported specifically in policy and procedure related to special education meetings.

Colleagues have been extremely helpful, some of the people here, I would say. And then I guess the special education department, it's mostly informal. It's kind of like grabbing somebody on the fly to help me (Interview, line 22).

Also, Sawyer Hill High School special education teacher, Chris Wells, shared that he utilized his department chair and other special education teachers for support when he had questions:

And I think that probably the main resources I had available to me were the special education staff here. You know, the department chair or even just the other three or four teachers that I have been around (Interview, line 25).

In both Valeria and Chris' situations, they both describe having a group of teachers whom they could turn to with questions about their daily jobs.

Summary of Finding 2

Since both district leaders and principals identified instructional coaching as a means of teaching instructional practices to job-embedded teachers, it may be worthwhile to consider a summary of these two participant groups. Furthermore, while job-embedded teachers did not name instructional coaching as a need, one teacher did want more observations and feedback from administrators, instructional coaches, or even students. Figure 4.4 describes how each participant group viewed instructional coaching as a part of job-embedded teacher professional learning.

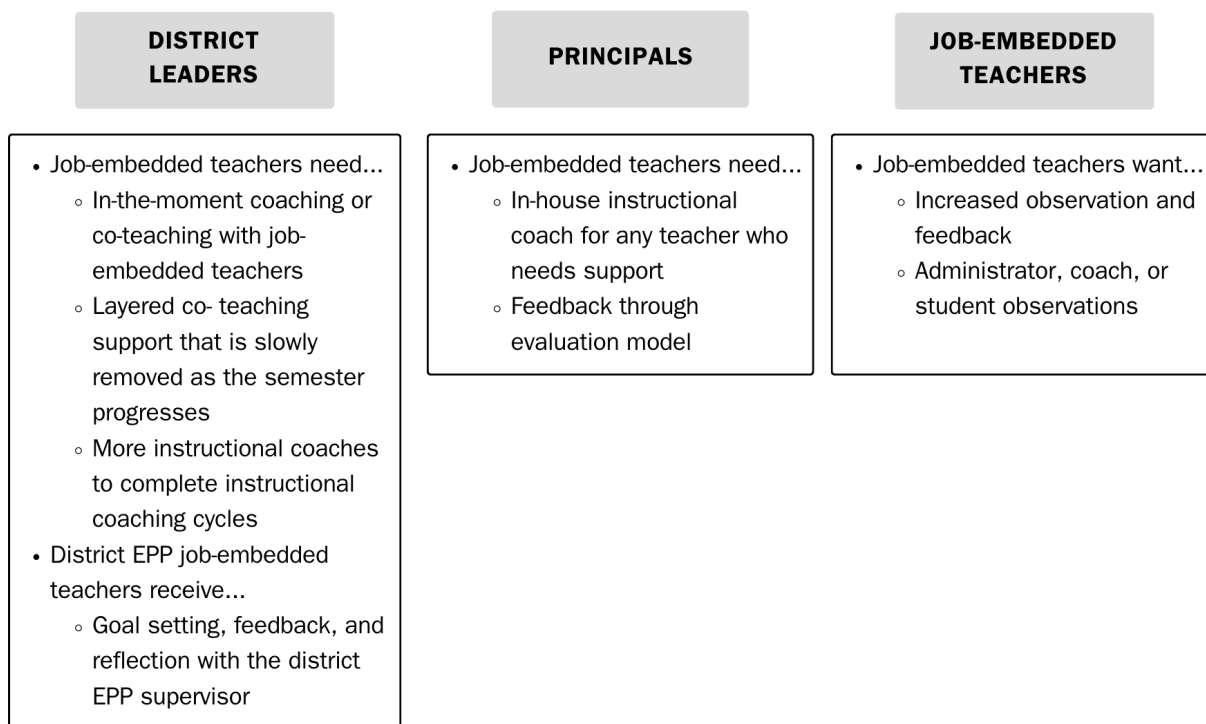
Figure 4.4*Summary of Participant Groups' Perspectives of Instructional Coaching*

Figure 4.4 describes the similarities between educational leaders and job-embedded teachers, and it is noteworthy that the most structured instructional coaching cycles appear to be within the district-based EPP. This means that career and technical education (CTE) teachers may receive the most uniform instructional coaching component of their onboarding, while IHE-based EPP job-embedded teachers may or may not receive instructional coaching. The opportunity for IHE-based job-embedded teachers to receive instructional coaching becomes strictly a building-based leadership decision and is not necessarily guaranteed as part of their onboarding experience.

Despite these differences, district leaders and principals indicated that instructional coaching is a beneficial practice that job-embedded teachers have experienced or that they would like them to experience in the future. This implication will be discussed further in Chapter 5.

Finding 3: Some district leaders and most principals primarily attribute job-embedded teacher success in instructional practices to the individual teacher’s character.

This finding aligns with RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools? Interview responses of principals regularly identified the self-efficacy of the job-embedded teacher as the direct cause of the teacher’s success. The following sections describe Finding 3.

District Leaders’ Perspectives of Teacher Characteristics

Some district leaders interviewed in this study perceived that effective job-embedded teachers are those who are self-efficacious and seek out solutions to problems they have in the classroom outside of the professional learning provided. District leaders described the teacher’s character as something that could not be taught but rather a fixed component of how the teacher entered the profession. While Region A leader, Stella Harper, did describe a need for job-embedded teachers to be “open to learning,” she did not align that necessary openness to self-efficacy in solving problems (Interview, line 31). Additionally, Jack Turner, Region A leader, expressed wanting job-embedded teachers to have more instructional coaching and co-teaching experiences (Interview, line 31). Also, Ingrid Blake, the district EPP leader, shared how she used instructional coaching with her job-embedded teachers to have them refine specific instructional practices (Interview, line 25). In Jack and Ingrid’s examples, successful instructional coaching, if done well, created opportunities for job-embedded teachers to be open to learning and adjusting their practices.

Principal Perspectives of Teacher Characteristics

Parallel to district leaders, principals expressed that individual character impacted the job-embedded teacher’s success. However, most principals tied this character trait to self-efficacy and the teacher’s ability to solve problems outside of the professional learning provided.

Principals tended to view this as an innate characteristic of the job-embedded teacher that could not be taught or learned.

For example, when asked if professional learning on instructional practices helped job-embedded candidates to implement instruction, James Alden replied, “I think I think it [instructional practice implementation] is tremendously dependent again; all this is candidate dependent” (Interview, line 22). This may align with James’ philosophy on hiring job-embedded candidates in which he shared the following:

We don't have a lot of job-embedded teachers, but we have a few. But I'm very selective in knowing who we have because we hire from fit and personality. In general, we hire kid people, so we know who's going to click with the kids [who] are not (Interview, line 18).

In these responses, James does not specifically identify problem-solving as a necessary skill for job-embedded teachers. However, James seemed to prioritize individual character, valuing job-embedded teachers who place students at the center of their decision-making and who also possess qualities that align with the values of Sawyer Hill High School.

Similarly, principal Dave Grant felt strongly about the individual teacher’s character and self-reliance as a means of success in teaching. For example, when asked what thoughts Dave had on the candidates produced through a job-embedded pathway to teaching he identified the necessary traits:

It really is what the individual makes of it. So, there are people with different skill sets, and I have hired many job-embedded teachers over the years, and most of them have worked out. Really. Well, obviously, they [job-embedded teachers] have a lot to learn having never been in a traditional education program, having not stepped foot in a classroom. But when a person has the desire to learn, they love kids, and they love education and teaching, and they have kind of that with it mindedness and that skill set to be on top of kids, and to hold them to high expectations, then they're going to be okay, I think regardless of the [job-embedded] program (Interview, line 11).

Dave, James, and Stella all addressed the need for a job-embedded candidate to be willing to learn. Also, despite Dave and James expressing it differently, they appeared to identify a student-first mentality as a necessary character trait of a job-embedded teacher. By Dave stating that job-embedded teachers need to “hold them to high expectations” (Interview, line 11) and James states that he hires “kid people” (Interview, line 18), they are both placing student-centered values at the highest priority of their hiring decisions.

Dave also identified that job-embedded teachers need to be willing to seek assistance, especially as they are learning the profession. Dave expressed this by stating:

With teachers from all different programs, and really one of the keys there is, are they [job-embedded teachers] willing to help? Are they willing to ask for help? And that becomes incumbent upon us as administrators and colleagues to know it's okay. You're going to struggle. It's going to be challenging, but we're [principals are] here to help you, but we can't help you if we don't know (Interview, 20).

Essentially, Dave described needing job-embedded teachers to identify when they are struggling and to seek support from principals, and perhaps other structures, to help them deliver instruction. As Dave noted, “We [principals] aren't in the classroom every day, all day long” indicating that it may be challenging for principals to ascertain the specific needs of a job-embedded teacher (Interview, line 20). Dave's perspective here as the principal emphasizes the need for job-embedded teachers to be self-efficacious in problem-solving while also seeking principal support when needed.

Another principal, Ryan Walker, shared an example of how a teacher displayed problem-solving skills as they related to classroom management. Ryan shared that while he was an assistant principal at a high school in Pooley County Schools, a job-embedded auto shop teacher shared a desire to learn about classroom management. Ryan summarized what the auto shop teacher stated:

I [an auto shop teacher] know everything about cars, but I don't know how to teach and manage a classroom. And how do you manage students? (Interview, line 106).

Ryan followed that summary by saying, “so that's what he wanted to learn,” which showed how Ryan identified a teacher seeking out knowledge and coming to a principal for assistance (Interview, line 106). This also aligned with Dave’s description of job-embedded teachers needing to be willing to ask for help. James, Dave, and Ryan all appeared to describe teachers as needing character traits, specifically problem-solving and the ability to seek assistance, to be successful in teaching.

Sub-finding 3.1: District leaders and principals desire more knowledge and communication with job-embedded educator preparation programs to better support the success of job-embedded teachers.

During the interviews, district leaders and principals conveyed that they had limited knowledge about the job-embedded EPPs, with their understanding largely confined to the district-based EPP. This could be due to simple proximity; the district-based EPP is contained within Pooley County Schools and its leader is a long-time school employee. Being part of the district may naturally enhance communication between the school district and district-EPP, fostering stronger connections with education leaders. As a result, district leaders and principals indicated a desire for increased communication with the job-embedded EPPs, particularly the IHE-based EPP.

Knowledge of Educator Preparation Programs. When district leaders or principals were asked about job-embedded programs as a pathway to teaching, some explicitly mentioned their limited knowledge of the IHE-based EPP and/or the district-based EPP. For example, principal Ryan Walker could not identify differing needs of district-based EPP and IHE-based job-embedded teachers stating, “I can't even answer that question, because I'm unfamiliar with either one” (Interview, line 41). Ryan went on to state ways that he attempted to learn about the

programs when hiring candidates by calling the district human resources department or by reading biweekly principals notes in which:

[There were] brief little blurbs or just basic information. You know, which is usually around hiring like you can hire a job-embedded person based on these things. But it's nothing like - this is what the program is, and these are the steps on how to apply. Or these are the different pathways (Interview, line 59).

Murch Point Middle School, the school in which Ryan serves as principal, has both district-based EPP and IHE-based EPP teachers. Ryan's remarks indicated a desire to know more about the job-embedded EPPs, and he is forthright in his inability to answer questions about the EPPs.

Other principals indicated an uneven understanding of the different EPPs. For example, when asked to identify the needs of job-embedded teachers based on their EPP, principal Evelyn Mercer stated that she could better explain IHE-based EPPs because "her experience has primarily been and working with teachers who have been in EPP program through the University of Evergreen⁶" (Interview, line 17). Principal Dave Grant had similar feelings: "I had teachers in different pathways from the University of Evergreen last year that they offered. I don't know that I have ever had any from the [district-based] EPP" (Interview, line 14). In contrast, Jack Turner shared that he felt more connected to the district-based EPP:

It would seem like the [Pooley County] EPP is probably a little tailored or little more focused on exactly what Pooley County teachers might need. In my experience, it seems that the communication seems to be a little bit better and clearer (Interview, line 15). Jack's response may suggest that the communication from the district-based EPP is clearer, which may impact the overall job-embedded teachers' experience and instructional practice

⁶ Pseudonym of an institute of higher education.

implementation. Each of the principals and district leaders indicated a greater familiarity with certain job-embedded EPP programs, and this may impact their responses in the interviews.

Communication with Educator Preparation Programs. In addition to knowledge, one principal and one district leader indicated a need for increased communication and collaboration between the schools and EPPs. Specifically, principal Ryan Walker also expressed wanting better communication in his statement:

I wish there was more collaboration or communication with the programs with the base schools, so that we [principals] knew how to better support them in their roles (Interview, line 36).

The ending of his statement “so that we knew how to better support them in their roles” seems to indicate a willingness to collaborate between principals and teachers (Interview, line 36). It also cycles back to Dave Grant’s comments about principals being willing to assist job-embedded teachers by saying, “we’re [principals are] here to help you, but we can’t help you if we don’t know” (Interview, line 20). Ryan and Dave described a willingness to help job-embedded teachers, and in particular, Ryan highlighted a need for increased communication to facilitate this support that will overall impact job-embedded teachers’ instructional practices.

Aligned with principals, Region A leader Jack Turner identified this need for communication from a different perspective. He felt that sometimes the IHE may have different objectives as compared to schools and school districts, which he felt may impact job-embedded teachers’ success:

I think sometimes what the University of Evergreen⁷ values and wants to teach potential teachers is not always in line with [Pooley County Schools]. And so sometimes you have different philosophies, whether that’s around high-quality instruction materials and some of those things. Then I think you know we’re hopefully all kind of on the same page and

⁷ Pseudonym for the IHE.

Pooley County, although it's really large and big, and that's quite an endeavor as well, but that has been a bit of an obstacle as well (Interview, line 17).

While this statement is broader and may apply to more than job-embedded programs, it seems to underscore a perception of potential misalignment between the IHE and district. This misalignment may be due to communication or otherwise, but nevertheless, some of the data collected in the interviews of this study seems to indicate a disconnect between the IHE-based EPP and Pooley County Schools district as whole.

Summary of Finding 3

Based on the data presented in Finding 3, district leaders and principals appear to be invested in job-embedded teacher success. However, district leaders and principals also identify that the teachers themselves and the relationship between the school district and their EPP is critical to their success. In particular, principals expressed a desire to help job-embedded teachers, but they also identified that the individual teacher must be willing to learn, seek assistance, and problem-solve. These teacher characteristics may be valuable for success in any profession, but they are especially critical here because job-embedded teachers are entering the field with minimal prior training. For example, unlike an accounting major who enters the accounting profession after years of coursework and practical experience, job-embedded teachers are entering a career where their previous college education may not have included any teaching-related coursework or experiences.

Furthermore, the Region A leader, Jack Turner, who identified a need for communication and alignment, shared he had greater familiarity with the district-based EPP. In his interview, he could describe the experiences that district-based EPP job-embedded teachers had within their classroom and EPP experience. He could not share these details of the IHE-based programs and said that objectives may not be aligned between the IHE and school district. This communication may impact the overall job-embedded teachers' success in implementing instructional practices.

Discussion

Chapter 4 presented the data and findings to understand the perspectives of job-embedded teachers and their education leaders of job-embedded teacher professional learning experiences. While job-embedded programs have increased the pathways to teaching, understanding how these teachers learn instructional practices is important to student success, and thus, teacher success and retention. Interviews of twelve individuals including four district leaders, four principals, and four job-embedded teachers in Region A of Pooley County Schools were analyzed to find emergent themes. Additionally, seven documents were analyzed for the presence of instructional practices to inform the interviews. The findings in Chapter 4 respond to the perspectives of the participant groups to find similarities and differences. This conclusion synthesizes the findings with the relevant literature from Chapter 2 to develop commendations and recommendations presented in Chapter 5.

This study explored the perspectives of district leaders, principals, and job-embedded teachers of professional learning practices used to implement instructional practices. Participant responses generated three findings. Two findings identified similarities and differences in the perspectives of district leaders, principals, and job-embedded teachers. One finding described district leaders' and principals' views on why job-embedded teachers were successful.

District leaders, principals, and job-embedded teachers were overwhelmingly positive about the job-embedded program itself. District leaders and principals expressed that job-embedded teachers played an important role in filling teaching positions, and they also emphasized that job-embedded teachers bring content expertise to the classroom. Multiple principals gave examples of job-embedded teachers whom they hired, and part of the principal's decision to hire was due to their content expertise. This aligns with my conceptual framework (Figure 1.2) which identified that job-embedded teachers are influenced by their content knowledge and experience. These, in turn, then impact job-embedded teachers' ability to implement instructional practices.

However, these district leaders and principals also noted that job-embedded teachers may lack classroom management knowledge, which they believed significantly impacted instructional practices in the classroom. These findings align with the literature on education leaders' perspectives of non-traditional educator preparation programs. In studies by Bartholomew et al. (2018), Diamond et al. (2020), and Brenner et al. (2015), principals expressed concerns about hiring non-traditional pathway teachers due to the principals' perceiving that these teachers lacked pedagogical, classroom management, and parent communication skills. The concerns raised in these studies seem to match the concerns raised in this study of Region A job-embedded teachers. This also aligns with my conceptual framework (Figure 1.2) in which features of effective professional learning includes both pedagogy and management skills. District leaders and principals expressed that management skills are a necessary component of professional learning for job-embedded teachers.

District leaders, principals, and job-embedded teachers all identified similar needs for job-embedded teachers to implement instructional practices through professional learning. District leaders and principals tended to prioritize instructional practices, assessment, and classroom management; however, principals more often placed classroom management as the highest priority. In contrast, job-embedded teachers more often emphasized the need for professional learning in instructional practices to enhance their effectiveness in implementing instruction. Those same job-embedded teachers also identified taking advantage of some district training and informal teacher collaboration, but they also identified conflicting schedules and sometimes a lack of accessibility to professional learning as impediments to improving their instructional practice.

When the study's participants identified professional learning that did impact instructional practice, there were some commonalities between the experiences and the literature that describes features of effective professional learning. For example, a shared vision with school leadership fosters collective professional learning and increases the likelihood that teachers will

implement advanced instructional practices (Banilower et al., 2007; Johnson, 2006; Pringle et al., 2020). In this study, principals identified that they wanted to be able to support teachers and assist them when job-embedded teachers asked for support, and that may align with the shared vision and leadership needed for effective professional learning.

Additionally, other features of effective professional learning were evident in some experiences of job-embedded teachers within this study. Specifically, continuous and recurring professional learning that is collaborative and includes feedback and reflection is more likely to advance teachers' instructional practices (Darling-Hammond et al., 2017; Dogan & Adams, 2020, 2020). This also aligns with my conceptual framework (Figure 1.2), in which collaboration is identified as a feature of effective professional learning. For example, professional learning experiences described by job-embedded teachers in this study sometimes included the following: continuous and recurring through instructional coaching, collaborative with another teacher or administrator, and reflective with feedback to improve instructional practices.

Furthermore, some study participants reported mentoring and induction as key components of their professional learning to implement instructional practices. Studies suggest that a comprehensive, multifaceted mentoring program yields the best results for student learning, teacher satisfaction, and teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Keese et al., 2023). Since these job-embedded teachers are new to the profession, it may be important to consider how mentoring and induction increases the likelihood of these new teachers staying in the profession.

Notably, the findings within this study were challenging to connect direct associations with professional learning models. District leaders and principals did not explicitly identify a professional learning model utilized in creating their professional learning plans for job-embedded teachers. As discussed in Chapter 2, there are professional learning models (PLMs) that identify how teachers learn in conjunction with teachers' personal beliefs, student outcomes, school contexts, and reflection. These models vary in linear, interrelated, and cyclical

forms (Boylan et al., 2018). Despite the findings lacking an outright connection to a professional learning model, upon examination of the data in this study, the findings continue to align with the theoretical framework of complexity theory professional learning model developed by Opfer and Pedder (2011). Since this theory integrates the influences of the teacher, school, and the learning activity system, this study addressed and identified how the job-embedded teacher is situated in a moving context of their school, students, EPP, and professional learning. Perhaps it may be useful for Pooley County Schools to consider Opfer and Pedder's (2011) PLM when developing meaningful professional learning and structures to implement instructional practices.

Pooley County Schools district leaders, principals, and job-embedded teachers clearly identified job-embedded teaching as a necessary and valuable component of instruction and staffing. Participants shared that job-embedded teachers bring content expertise and field experience to the classroom. Participants also shared that job-embedded teachers can be used to fill vacancies in an already challenging labor market. This aligned with the literature from Kraft and Lyon (2022) which explored reasons why fewer individuals are pursuing a teacher career compared to the past. Furthermore, this also aligned with literature from Edwards et al. (2023) and Goldhaber and Holden (2021) who addressed that job-embedded teacher recruitment is only one part of addressing the teacher shortage; job-embedded teachers need to be retained in the teaching profession to truly address teacher shortage long-term.

Despite these positives, participants recognized that job-embedded teachers enter the profession without necessarily having learned instructional practices. While their EPP may include that coursework, interview data from this study suggests that job-embedded teachers are entering the profession without the same instructional practices skills as traditional EPP pathway teachers. Participants seemed to recognize this issue, with job-embedded teacher Valeria stating it was "sink or swim" (Interview, line 39) and principal Dave Grant stating, "It's what the individual [job-embedded teacher] makes of it" (Interview, line 11). These remarks, amongst others in the interviews of this study, seem to indicate a job-embedded teacher's

experience and success may be uncertain. While unexpected events can arise in any profession, placing job-embedded teachers in a situation with pre-existing uncertainties from other job-embedded teachers and their leadership is concerning. Therefore, Pooley County Schools must address the professional learning needs to remove these uncertainties for job-embedded teachers and develop their instructional practice skills, so they feel prepared to teach their students. When combined with improved practices in assessment and classroom management, as identified by district leaders and principals, job-embedded teachers are more likely to achieve success with their students and potentially remain in the profession longer (Ingersoll & Strong, 2011; Karlberg & Bezzina, 2022; Shanks et al., 2022; Wiens et al., 2019).

Chapter 5: Commendations and Recommendations

This study explored a problem of practice to understand the perspectives of job-embedded teachers and their education leaders on job-embedded teacher professional learning experiences in Region A secondary schools within Pooley County Schools. Job-embedded teachers are currently enrolled in educator preparation coursework while working as teachers of record in Tennessee schools. The Tennessee Department of Education allows these individuals to complete their coursework requirements while already teaching (Tennessee Department of Education, 2023c).

This context of this study was within the Tennessee teacher shortage and the broader national teacher shortage landscape. States, including Tennessee, have created programs to alleviate the teacher shortage. These programs include non-traditional educator preparation programs (EPPs) such as job-embedded, alternative route to certification, and Grow Your Own programs. This study included teachers enrolled in job-embedded EPPs, which are programs that allow individuals to serve as the teacher-of-record while enrolled in the EPP (Tennessee Department of Education, 2023c).

In Pooley County Schools, job-embedded teachers are enrolled in either an institute of higher education-based EPP (IHE-based EPP) or a district-based EPP. These programs differ in administration - either managed by the IHE or Pooley County Schools - and differ in candidate certifications offered. The district-based EPP is designed for career and technical education (CTE) certification while the IHE-based EPP is designed for core content area certification. These job-embedded teachers have diverse professional learning needs to develop instructional practices, utilize feedback, and learn from modeling (Darling-Hammond, 2010; Darling-Hammond & Baratz-Snowden, 2007). So, job-embedded teachers need continuous professional learning, yet job-embedded teachers come from diverse backgrounds.

To better understand the perspectives of job-embedded teachers and their leaders on professional learning experiences that helped them implement instructional practices, I developed a study to investigate two research questions:

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?
- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

I developed an exploratory case study to investigate these two questions by conducting interviews and analyzing documents. Data analysis revealed three findings that are presented in Chapter 4. In conjunction with the literature in Chapter 2, and since this was an exploratory study, these findings were used to identify areas of commendation and recommendation to better understand the problem of practice. Chapter 5 presents commendations and recommendations for Region A and Pooley County Schools to consider with current and future job-embedded teachers' professional learning experiences.

- Commendation 1: District leaders, principals, and job-embedded teachers all share a favorable view of the job-embedded teacher program. They appreciate how it integrates content experts into the teaching environment and addresses the teacher shortage.
- Commendation 2: Job-embedded teachers felt that their professional learning experiences were valuable to implementing instructional practices. They specifically identified which professional learning experiences were most helpful in applying these practices effectively.
- Recommendation 1: Develop district-wide structures for job-embedded teachers in the IHE-based EPP to provide professional learning on instructional practices.

- Recommendation 2: Create a formalized structure for district leaders and principals to receive job-embedded EPP information and communication by systematizing the connection between the district and the IHE.

This chapter describes these commendations and recommendations by connecting them to the literature and study findings.

Commendations

Pooley County Schools' education leaders and job-embedded teachers are dedicated to the job-embedded teaching pathway and its success. First, education leaders and job-embedded teachers are in favor of the job-embedded pathway and appreciate how it brings content experts into education while also addressing the teacher shortage. Second, job-embedded teachers are experiencing professional learning activities that impact their instructional practices.

Commendation 1: District leaders, principals, and job-embedded teachers all share a favorable view of the job-embedded teacher program. They appreciate how it integrates content experts into the teaching environment and addresses the teacher shortage.

Despite some of the challenges that job-embedded teaching may present, all participants in the study were overwhelmingly positive about the pathway to teaching. District leaders were appreciative of the job-embedded programs and their desire to fill educational needs for teaching candidates. Grace Morgan, the district leader of instruction and teaching, was positive about job-embedded teaching programs. She stated that “[the district] is trying to do really positive things...but we still have a lot to learn, and [we have] opportunities to grow in these areas” (Interview, line 19, 34). Similarly, Jack Turner, Region A leader, valued the state and district's commitment to seeking creative solutions to remedy the teacher shortage while also incorporating content experts through job-embedded programs. Jack stated that he was “pretty excited about it” (Interview, line 11). Also, Ingrid Blake, the district EPP leader, identified bringing content experts to the classroom as a strength of job-embedded programs by saying

“They [job-embedded teachers] are a special breed in the sense that they are industry professionals” (Interview, line 12). Although some district leaders, including Grace, Stella, and Jack, noted that job-embedded programs could benefit from certain improvements, they all agreed that the program’s advantages outweighed its challenges.

Similarly, principals also had favorable impressions of job-embedded programs. All of the principals in this study, James, Ryan, Dave, and Evelyn, were appreciative of job-embedded teachers due to two factors: 1) job-embedded teachers brought content expertise and professional field experience to the classroom and 2) job-embedded teachers helped fill teaching positions in an already challenging environment of teacher shortages. James described the job-embedded teachers as “necessary” (Interview, line 8), and Evelyn described that she was “very appreciative” of the program (Interview, line 13). Ryan shared that job-embedded programs allowed “more opportunities to hire candidates that are interested in teaching that have experience in the field (Interview, line 20), and Dave shared that many of his job-embedded teacher hires had “worked out” (Interview, line 11). Each principal had hired job-embedded teachers in their school and valued that hiring option.

Beyond content expertise, principals and current job-embedded teachers praised the program’s structure that allowed job-embedded teachers to earn a teaching salary while enrolled in a job-embedded EPP. Principals and job-embedded teachers expressed that of particular importance was the reality that many individuals cannot pause their careers to return to school to earn a degree. In his interview, Principal James Alden recognized that the program allowed individuals to “earn money” while working on their degree, and often “you can’t take a year off work to make that switch [to teaching]” (Interview, line 8). In particular, job-embedded teachers, including Valeria, Chris, and Henry, expressed that they would not be teaching if the program was not job-embedded and concurrent to their EPP to earn a teaching salary. Valeria said that “she could not have done that [the traditional EPP pathway]” (Interview, line 39). Simply stated, the job-embedded teachers in this study would not have pursued a teaching

career if they had to enroll in a traditional EPP that required them to pause their careers. Based on these remarks, not only did the job-embedded EPP provide content experts, but it also provided a financial means to enter the teaching profession.

At its core, this study revealed a consistent pattern of appreciation and recognition for job-embedded teachers and their expertise in the content. In addition, the program flexibility to provide EPP learning concurrent to teaching created a financial pathway to enter the teaching profession.

Commendation 2: Job-embedded teachers felt that their professional learning experiences were valuable to implementing instructional practices. They specifically identified which professional learning experiences were most helpful in applying these practices effectively.

This study revealed that job-embedded teachers could identify specific activities that helped them to implement instructional practices. While participants in this study identified different sources of professional learning for job-embedded teachers, it is notable that job-embedded teachers could articulate how they were learning instructional practices.

Job-embedded teachers were overwhelmingly positive about their teaching colleagues at each school. While job-embedded teachers described more informal teaching collaboration activities than identified by education leaders, these experiences appeared reliable and trusted by job-embedded teachers. The job-embedded teachers curated a set of trusted colleagues for support, but they identified this set of individuals independently of principals. For example, Luke brought questions to his colleagues over the “lunch table” with his “peer group that is more experienced” (Interview, line 19) to seek feedback before implementing a lesson. Valeria shared her “colleagues were extremely helpful” (Interview, line 15) with quick advice, and Chris sought out the “department chair or three to four other teachers” (Interview, line 24) for advice when needed. Henry shared that he would sometimes get input from a colleague who had taught a similar course in the past.

Job-embedded teachers were also able to identify more formal structures for professional learning in instructional practices. Henry shared that the school's instructional coach "was one of the biggest helps" (Interview, line 30) for him to understand the standards and unpack them into learning objectives. Valeria valued a specific curriculum training that she attended which was open to any district teacher by saying it was "really good" and included "using manipulatives [with students]" (Interview, line 27). Chris appreciated special education district learning and identified it as "helpful" (Interview, line 27) to learn policies and procedures of the school and district. Based on these responses, job-embedded teachers were grateful for receiving some professional learning from the school or district that impacted their instruction.

Recommendations

The recommendations from this study are based on my findings and my research paradigm for this study as described in Chapter 1, interpretivism. As an administrator in one of the Region A secondary schools, I understood the study context since I work with district leaders, Region A principals, and job-embedded teachers daily. In interpretivism, my knowledge of this problem of practice was constructed through social experiences, and this study aligned with the constructivist epistemology and ontology (Farrow et al., 2020). When developing recommendations, I focused on identifying changes that would be the most impactful in two ways: 1) furthering job-embedded teachers' learning of instructional practices that acknowledge their diverse backgrounds and 2) increasing district leaders' and principals' knowledge and communication with EPPs.

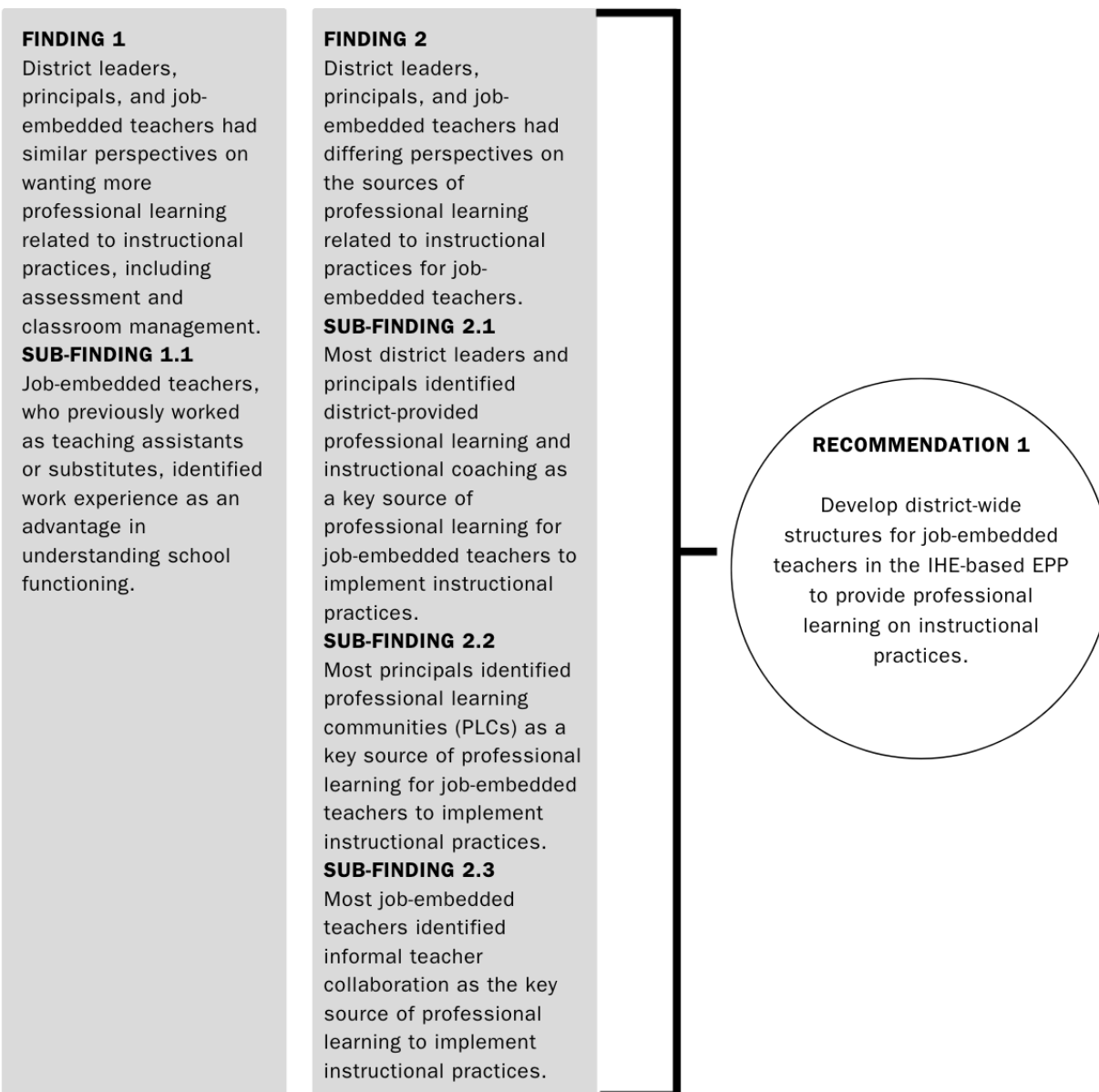
Recommendation 1: Develop district-wide structures for job-embedded teachers in the IHE-based EPP to provide professional learning on instructional practices.

Success of job-embedded teachers is valued by Pooley County Schools to bring content experts into the teaching profession while also filling needed teaching positions, as noted in Commendation 1. However, findings revealed that district leaders, principals, and job-embedded teachers shared different sources from which they felt job-embedded teachers

received professional learning in instructional practices. Figure 5.1 shows the alignment of the findings with this recommendation.

Figure 5.1

Alignment of Findings 1 and 2 with Recommendation 1



District leaders identified district-provided professional learning, district leaders and principals identified instructional coaching, principals identified professional learning communities (PLC), and job-embedded teachers identified informal teacher collaboration (see

Figure 4.3). Rather than this being a comprehensive, well-coordinated approach to supporting job-embedded teachers, the data reflected a lack of continuity and differing experiences of job-embedded teachers.

Research suggests that any new teacher needs a strong, multifaceted induction program to yield the best results for student learning, teacher satisfaction, and teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Keese et al., 2023). Specific structures for job-embedded teachers to provide professional learning on instructional practices may be part of that multifaceted induction program. Given the current teacher shortage, it is possible that any backslide in job-embedded educator retention could have negative impacts on student learning and exacerbate the teacher shortage issue. While the district has revised its New Teacher Experience to be more aligned and specific, the documents analyzed in this study did not specifically address job-embedded teachers. Thus, I recommend creating district-wide structures for professional learning through professional learning that responds to diverse backgrounds and instructional coaching.

Professional Learning that Responds to Diverse Teacher Backgrounds. District leaders in this study shared that education is multifaceted and challenging to identify all the components while attending to the differences amongst job-embedded teacher backgrounds. Principals valued the professional experiences and content expertise that job-embedded teachers brought to the profession. Job-embedded teachers shared diverse backgrounds including non-education career experiences and education-career experiences such as being teaching assistants and substitute teachers. This study revealed that job-embedded teachers are less uniform than their traditional EPP counterparts, and thus, education needs to approach their professional learning in response to their diverse backgrounds.

Professional learning models (PLMs) are built on how teachers learn in conjunction with teachers' personal beliefs, student outcomes, school context, and teacher reflection, and these models vary in linear, interrelated, and cyclical forms (Boylan et al., 2018). This study's

theoretical framework was based on one of these PLMs, the complexity theory professional learning model, which was developed by Opfer and Pedder (2011) to address the concern that most PLMs did not account for the systems in which teachers acted, including schools, districts, and the greater education learning system. Given that job-embedded teachers come from diverse backgrounds and work in different schools, grade levels, and content areas, it makes sense for Pooley County Schools to apply Opfer and Pedder's (2011) work to formalized structures to support job-embedded teachers.

Pooley County Schools can implement the complexity theory professional learning model in a few ways. First, the district can consider completing a context evaluation to obtain clarity on the types of professional learning that job-embedded teachers experience district-wide. A context evaluation is designed to "gain insights" or "determine necessary inputs" of a particular program (Mertens & Wilson, 2019, p. 243). While this study included a document analysis to review documents aligned with job-embedded teachers' professional learning experiences, it was not exhaustive and did not include all the district's schools. Pooley County Schools may develop context evaluation questions by implementing Patton's (2008) method of generating questions by getting stakeholder feedback, and the district may consider exploring the following additional questions:

- How do the current professional learning experiences align with the professional learning standards produced by well-known professional learning organization Learning Forward (2022)?
- What professional learning experiences are available from the district for job-embedded teachers to learn content-specific teaching strategies?
- How do individual schools within Pooley County Schools provide professional learning to job-embedded teachers to help them implement instructional practices?
- Which individuals or departments are responsible for providing professional learning to job-embedded teachers?

By asking these questions and those gathered from stakeholders, completing a context evaluation to understand the problem may help the district in future steps.

Second, Pooley County Schools can create job-embedded teacher professional learning experiences, based on shared content and grade level, that build community across schools and the district. Research suggests that collaboration is key to adult learning, and collaboration yields an increased likelihood that teachers will then implement learned instructional strategies (Darling-Hammond et al., 2017; Dogan & Adams, 2018, 2020; Doppelt et al., 2009; Nelson, 2009; Tam, 2015). Notably, ineffective collaborative structures may negatively impact professional practice and thus student learning, so it is critical to create a professional community for job-embedded teachers in effective, deliberate ways (Hudson, 2023; Sims & Penny, 2014). Pooley County Schools can begin by connecting job-embedded teachers with other job-embedded teachers in the county, including in different schools and district regions. This could happen in-person and through virtual methods such as Canvas, the district learning management system. Professional learning experiences on District Learning Days can be redesigned within each content area to address job-embedded teachers' needs aligned with their course content and region. Pooley County Schools can take these steps to impact professional learning and build a community for job-embedded teachers.

Third, district-wide structures for new teacher mentoring and induction can be revised to include guidance on specific supports for job-embedded teacher professional learning. The district already provides a framework for new teacher mentoring and induction which schools then implement with some autonomy for specific school and new teacher needs. School mentoring and induction plans help new teachers better organize instruction, create routines, and facilitate effective classroom management skills (Thompson et al., 2004; Wong, 2005). These mentoring and induction plans can be revised to have specific professional learning addressing job-embedded teachers' needs aside from the needs of other new teachers who are often entering the profession from traditional EPP routes. Job-embedded teachers come to the

profession with content expertise, and often professional experience, that can be leveraged to effective teaching through professional learning of instructional practices in a mentoring or induction program.

Instructional Coaching. District leaders and principals in this study also identified a need for job-embedded teachers to experience instructional coaching to develop their practices. Also, in this study, one job-embedded teacher, Henry, who had experience working with an instructional coach, identified that experience as one of the most helpful to him when initially entering the profession. Given the consistent identification of instructional coaching as a need across all participant groups of this study, Pooley County Schools can develop instructional coaching opportunities across all schools.

Notably, job-embedded teachers do not have a traditional EPP internship experience which would typically last one to two semesters. In this study, district leaders and principals identified the lack of an internship as either a detriment to the job-embedded teacher or a void that needs to be filled early in their teacher of record experience. District leaders and principals voiced that job-embedded teachers did not have the experience of an internship mentor teacher or supervisor observing their instruction and providing feedback. However, some structures could be created to create an instructional coaching experience and fill that perceived void.

First, instructional coaches can immediately begin instructional coaching cycles with job-embedded teachers. In Pooley County Schools, instructional coaching cycles are generally reserved for low-performing teachers; however, instructional coaching may be revised to apply to all job-embedded teachers, and, separately, instructional coaching may still apply to low-performing teachers. To be mindful of the Opfer and Pedder (2011) complexity theory professional learning model, these coaching cycles should be specific and tailored to the job-embedded teacher's needs rather than following a one-size-fits-all approach. Teachers who are new to schools and school structure may focus on instructional practices that foster engagement and predictable routines. Other job-embedded teachers who have worked as

teaching assistants or substitute teachers before and are comfortable with classroom procedures to facilitate culture may focus on instructional practices in assessment or questioning to monitor student learning. Schools without instructional coaches could identify an administrator or could partner with another regional school to share instructional coach support.

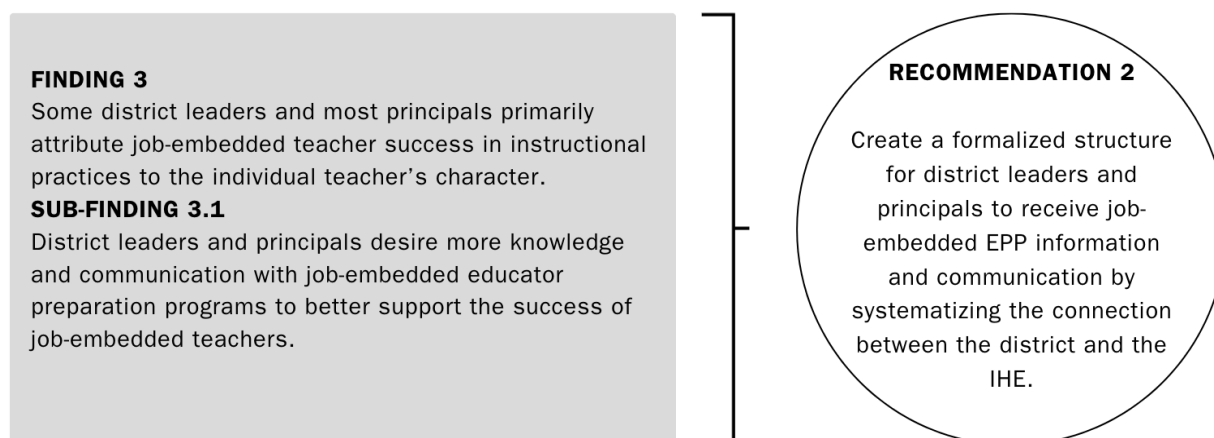
Second, there needs to be consistency in instructional coaching between job-embedded teachers in the district-based EPP and the IHE-based EPP. For example, Ingrid Blake, the district EPP leader, shared that she provides instructional coaching through classroom visits in which she provides feedback, identifies a goal for the next coaching cycle, and navigates teacher reflection in that process. It was clear in this study that IHE-based EPP job-embedded teachers are not getting that same experience. Furthermore, the district-based EPP works with CTE teachers, not core subject teachers. Thus, core subject IHE-based EPP job-embedded teachers are simply not all receiving instructional coaching. While this study was not designed to consider student achievement scores on standardized assessment, the reality is that Tennessee schools receive achievement and growth scores for students in the core subjects - English language arts, math, science, and social studies. These scores are used to develop the annual Tennessee Report Card data which, in conjunction with federal accountability status, identify specific school designations that impact schools (Tennessee Department of Education, 2024a, 2024b). Thus, the core subjects have the greatest impact on school designations, yet these core subject job-embedded teachers were receiving the least instructional coaching. The implications of this year-over-year trend may create challenges in core subject instruction that are not yet apparent. However, as job-embedded teaching becomes more widespread, this relatively minor issue could escalate significantly. The long-term implications for core subject areas should remain a key topic of the ongoing job-embedded discussion. This study's findings and recommendations serve as a launch point for instructional coaching to be a formalized structure for job-embedded teacher professional learning.

Recommendation 2: Recommendation 2 is as follows: Create a formalized structure for district leaders and principals to receive job-embedded EPP information and communication by systematizing the connection between the district and the institute of higher education (IHE).

The success of Pooley County Schools' job-embedded teachers is impacted by the ability of schools and the district to provide professional learning on instructional practices as described in Commendation 2. Figure 5.2 shows the alignment of the Finding 3 with this recommendation.

Figure 5.2

Alignment of Finding 3 with Recommendation 2



Research suggests that EPPs may consider revisions to bridge learning and practices between the EPP and the classroom to improve student learning, increase teacher satisfaction, and increase teacher retention (Darling-Hammond, 2006; Ingersoll, 2001). Furthermore, revising the partnership between the IHE-based EPP and the school may include aligning coursework, professional learning, or school reforms through a well-communicated and collaborative effort (Darling-Hammond, 2006; Tournaki et al., 2009). As discussed in Chapter 2, strengthening the IHE and school district partnership may help build IHE-based EPP and teacher candidate connections. I recommend that Pooley County Schools systemize the connection with the IHE

by creating a district leader position to advance that connection and to engage in discussions with the IHE around job-embedded EPP courses aligned with a clinical approach.

Creating a District Leader Position to Advance the IHE-School District Connection.

District leaders and principals identified a lack of knowledge about job-embedded EPP programs, and in particular, they were lacking knowledge about the IHE-based EPP as compared to the district-based EPP. One district leader noted that he most likely knew more about the district-EPP because it was district-based. The participant meant that the district-based EPP operated from the school district's central office, and the district-based EPP leader was originally a teacher within the district before advancing to her level in the organization. Interviews in this study highlighted that the proximity of the district-based EPP generated increased district leader and principal knowledge about the program.

A district leader position could be utilized as a conduit of information and communication between the IHE, school district leaders, and principals. District leaders and principals can learn about the IHE-based EPP program coursework, pacing, learning activities, and structures so they can better support their job-embedded teachers. Furthermore, a newly created district leader position can learn about the IHE-based EPP program and assist district leaders and principals with identifying the types of professional learning needed and structures for implementing those learning experiences. Since Pooley County Schools has no authority over how the IHE runs their job-embedded EPP, then increasing district knowledge and communication through this role would help job-embedded teachers in the IHE-based EPP. This could impact the job-embedded teachers' success in teaching and likelihood of remaining in the profession.

Engage in Discussion on Institute of Higher Education Job-Embedded Programs.

As noted in Recommendation 1, district leaders, principals, and job-embedded teachers would benefit from formalized structures for professional learning, including instructional coaching. A precursor to the instructional coaching recommendation is considering the EPP courses and

their alignment with a clinical approach. It is important to note that this study does not include the IHE, nor were any IHE employees recruited for this study. So, I have approached this recommendation with careful consideration and suggest that the IHE be included in further discussions.

As noted, job-embedded teachers do not participate in a traditional EPP that includes an internship or student teaching experience. Thus, they are actively learning in a practical setting in the classroom and through their coursework. As discussed in Chapter 2, research suggests that a more clinical-based approach to an internship allows teachers to try new skills and have a gradual release of responsibility (Darling-Hammond & Baratz-Snowden, 2007; National Council for Accreditation of Teacher Education, 2010). However, job-embedded teachers do not have the same experience as traditional EPP teachers.

I recommend that Pooley County Schools engage in a shared understanding with the IHE-based EPP to learn about the coursework, pacing, requirements of the degree, and clinical approach of the program. Through shared conversations, the school district and IHE can learn about each other's needs and ways in which the job-embedded program is and is not addressing student learning and teaching needs. Examples of talking points that would foster discussion and communication between the Pooley County Schools and IHE-based EPP may include the following:

- What coursework progression can Pooley County Schools anticipate that IHE-based EPP job-embedded teachers will experience?
- In what ways does the coursework require job-embedded teachers to solve problems in context?
- How does the coursework create opportunities for feedback and reflection with a mentor teacher or school-based supervisor?

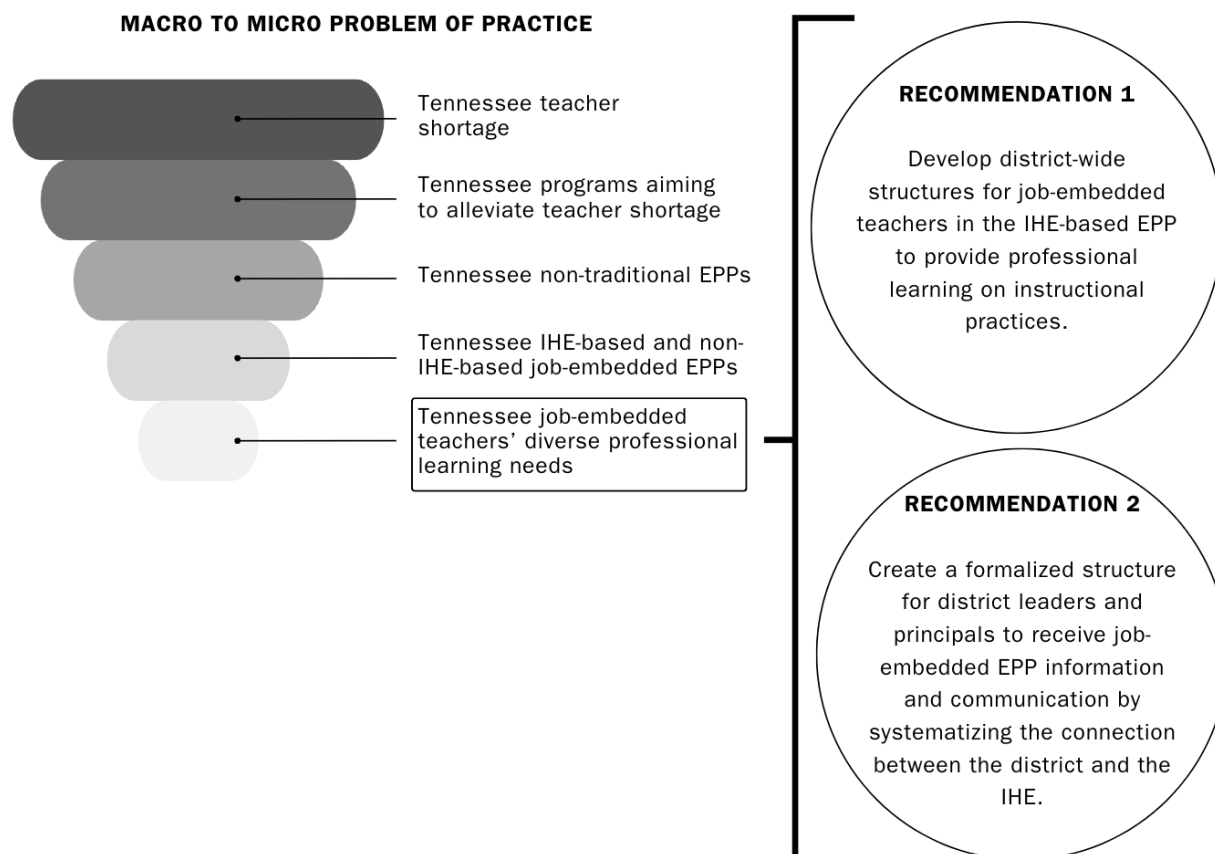
I recommend that this conversation be facilitated through the new district leader position also named in this recommendation to provide continuity to the information.

Connection to the Problem of Practice

These recommendations connect to the problem of practice by addressing the localized issue of understanding the perspectives of job-embedded teachers and their education leaders of professional learning to implement instructional practices. At a national level, education is facing a teacher shortage across multiple content areas along with a national labor shortage (U.S. Chamber of Commerce, 2024; U.S. Department of Education, 2024). Similar to other states, Tennessee has developed programs to alleviate the teacher shortage. One of these programs are non-traditional EPPs including Grow Your Own, alternative route to certification, and job-embedded teaching (Tennessee Department of Education, 2023c). This study specifically focused on exploring job-embedded teachers who were enrolled in IHE-based and district-based job-embedded EPPs. Furthermore, job-embedded teachers are working in a complex system with many influences, as described in my conceptual framework (see Figure 1.2) which is based on Opfer and Pedder's (2011) complexity theory professional learning model. Job-embedded teachers have different influences that impact their professional learning including differences in EPPs, content knowledge, work experiences and school and district professional learning experiences. Thus, these recommendations specifically address the problem of practice to meet the needs of job-embedded teachers to improve student achievement, school improvement, and teacher retention given their diversity. This connection is shown in Figure 5.3.

Figure 5.3

Connection of Problem of Practice to Recommendations



Limitations

The limitations of the study were beyond my control as the researcher (McGregor, 2018). Limitations include self-reported data and transferability. The interviews within the study were self-reported and could be subject to participant perspectives. I used coding, category, and patterns in my data analysis to try to find themes without including potential bias. I found that participants shared programs or parts of programs that I may have had knowledge of as an administrator. However, rather than assume what the participant was trying to convey, I asked the participant to describe the program they were identifying. For example, I interviewed Henry, a district-based EPP teacher, after I had talked with Ingrid, the district EPP leader. I had an idea

of the district-based EPP structure from Ingrid, but I asked Henry to clarify his understanding of the district-based EPP.

Also, I am an administrator at Murch Point Middle School, and I interviewed the principal and two teachers at that school. I was mindful of my positionality as someone of authority at the school and asked clarifying questions during those interviews to make sure I had the proper understanding of the participants' perspectives. I did this by maintaining a reflective journal and wrote analytic memos to attempt to remove any bias (see Appendices M and N, respectively).

While future studies need to address whether this data can be generalized, this study focused on six middle and high schools in the Region A of a singular school district. However, not all six of the secondary schools participated. I was only able to obtain participants from four secondary schools - one high school and three middle schools. Some issues with recruitment could be tied to data collection happening over the summer and start of the school year (June - August); however, I did leave the data collection window open longer than other typical capstone studies have done to try to offset this potential limitation. I wanted to select participants who were representative of the "maximum variation" in the sample to "allow for the possibility of a greater range of application" (Merriam & Tisdell, 2015, p. 257); however, the reality was that finding participants across the Region A secondary schools was more difficult than expected. District leaders and principals were relatively easier to recruit, but that may be because those individuals know me in a professional capacity and continue to work during the summer months. The majority of the teachers did not know me before this study, and thus, may have been less likely to participate. While the job-embedded teacher participant sample was small, they did represent three different content areas and both the district EPP and IHE-based EPP. So, issues with transferability are relatively small. If this study were to expand into a future study, additional recruitment efforts and a longer data collection timeframe may improve participation rates.

Conclusion

The commendations and recommendations presented in this chapter summarize this study of job-embedded teachers in Pooley County Schools' Region A secondary schools. Commendations include an overall favorable view of job-embedded teachers and district-wide sentiment that job-embedded teachers are receiving professional learning experiences. One recommendation includes creating district-wide structures for job-embedded teachers' professional learning to support teachers who are entering the profession from diverse backgrounds. This can be completed through a context evaluation to understand the current district professional learning options and through instructional coaching to provide a district-wide, yet customized, learning experience for teachers. A second recommendation includes creating a district leader position to improve knowledge and communication between the district and IHE. This district leader can then foster a district and IHE partnership around job-embedded EPP courses and clinical structure. These recommendations could create a stronger job-embedded EPP teacher experience to implement instructional practices and impact student learning.

This study may provide valuable insights into the job-embedded teaching landscape nationwide. Given the teacher shortage and overall labor shortage, not only do we need to attract teachers, but we need to retain them (Learning Policy Institute, 2016; Nguyen et al., 2022). One way teacher retention is influenced is through a teacher's perception of their success (Darling-Hammond, 2006; Ingersoll, 2001). If job-embedded teachers feel more successful and are more successful with student learning, then they may be more likely to stay in the profession (Darling-Hammond, 2006; Ingersoll, 2001). While this study focused on one region of a specific school district, the entire district is diverse including rural, suburban, and urban geographic and socioeconomic areas (Tennessee Department of Education, 2024b). The district's diversity may create an opportunity for other districts to review their practices and

inform the greater conversation of teacher shortage and job-embedded teaching as one means of ameliorating the issue.

Coincidentally, as this study was being completed, *Educational Leadership* published a full issue on new teachers with specific articles on supporting new teachers. Literature in the issue suggested that alternatively certified teachers, such as job-embedded teachers, need to have flexible mentoring and induction within a complex mode that recognizes the diverse candidates and needs while also educating these new teachers on classroom management (Bland et al., 2023; Goodwin, 2024; Kwok & Cain, 2023). Furthermore, in an interview with national education leader and author, Baruti Kafele, Kafele summarized his feelings by stating that school leaders are mistaken if they are “expecting that you can just put this new teacher in the classroom and they’re going to flourish” (McKibben, 2024, p. 16). By focusing an entire issue on new teachers, and specifically non-traditional pathway teachers, it is easy to see how this problem of practice has developed from being within peer-reviewed, research-based journals to mainstream publications. The success of job-embedded teachers is moving to the forefront of educational relevancy and becoming a central topic of educational discourse. Hopefully, this capstone can be a small part of that educational discussion.

Given the positive views of job-embedded teachers by district leaders, principals, and job-embedded teachers in this study and the relevancy of the topic, it is likely that job-embedded teaching will remain a permanent fixture of education. However, this study highlights potential vulnerabilities, particularly concerning job-embedded teachers learning of instructional practices. If not addressed, these vulnerabilities may undermine the job-embedded pathway and negatively impact the future of those teachers and students. If education is committed to student learning, achievement, and growth for societal advancement, then we owe it to our students to get this right. Improving professional learning for job-embedded teachers to implement instructional practices is paramount to impact our students’ learning and the betterment of our society.

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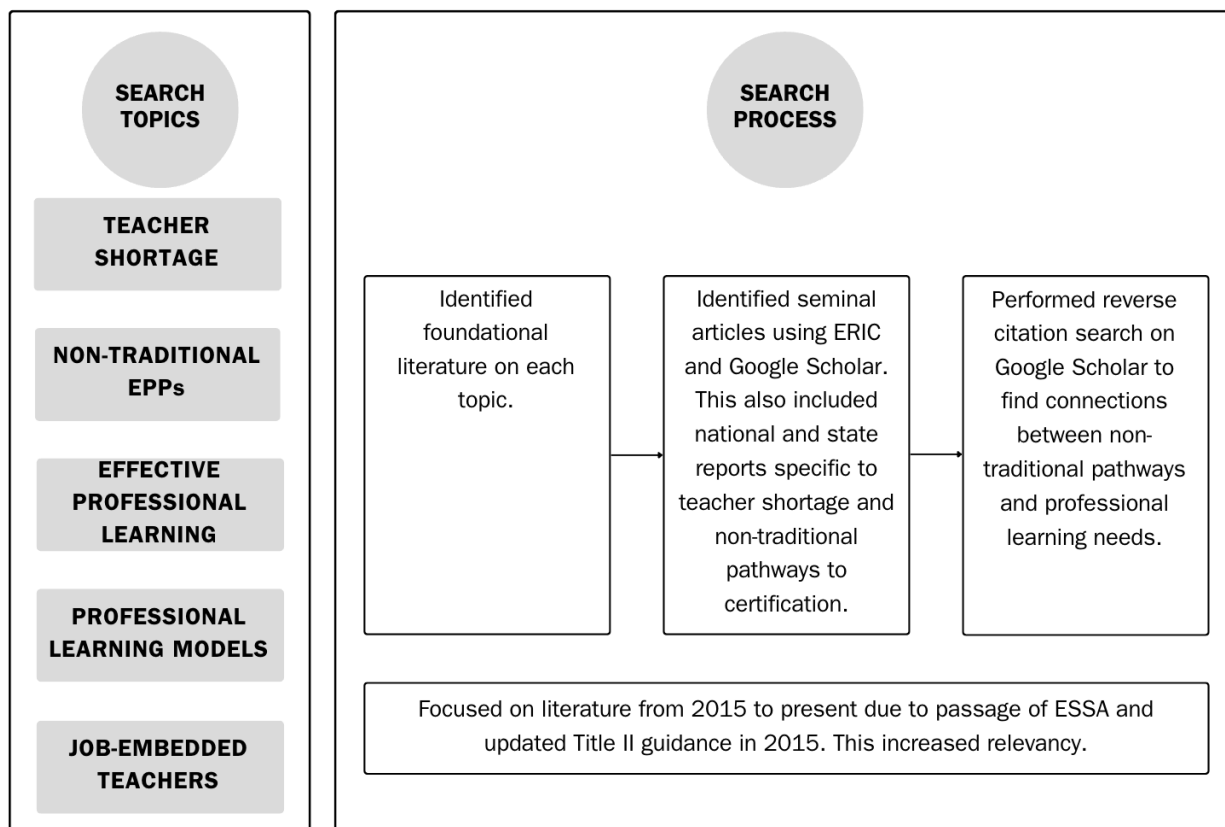
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Appendix A

Literature Review Search Process



Appendix B

Table 3.1

Demographics of Region A Secondary Schools

	Total Enrolled	White	Asian	Hispanic	Black or African American	Native American	SWD	ED	ELL
Casco Bay HS	1,997	74%	< 5%	11%	10%	< 5%	12%	10%	6%
Caldwell River MS	1,187	59%	< 5%	14%	23%	< 5%	15%	25%	12%
Elm Overlook MS ^a	555	59%	< 5%	19%	17%	< 5%	14%	18%	16%
Lake Valley MS	1,132	77%	6%	7%	9%	< 5%	10%	6%	< 5%
Sawyer Hill HS	2,067	77%	11%	7%	< 5%	< 5%	8%	< 5%	< 5%
Murch Point MS	1,328	79%	10%	6%	< 5%	< 5%	10%	< 5%	< 5%
Lake Valley MS	1,132	77%	6%	7%	9%	< 5%	10%	6%	< 5%
Williams Central HS	1,478	58%	< 5%	13%	25%	< 5%	10%	21%	6%
Caldwell River MS	1,187	59%	< 5%	14%	23%	< 5%	15%	25%	12%
North Star MS ^a	761	30%	< 5%	36%	32%	< 5%	16%	39%	25%
Lake Valley MS	1,132	77%	6%	7%	9%	< 5%	10%	6%	< 5%

^a These schools are not in Region A and thus not included in this study.

Appendix C

Recruitment Email

Subject line: UVA Research Opportunity – Job-embedded teacher experience

Dear [Insert Name],

My name is Catherine Ginel, and I am a doctoral candidate at the University of Virginia. My capstone project is investigating the job-embedded secondary teachers' professional learning experiences. The goal of this study is to understand how job-embedded teachers' instructional practices were impacted by these professional learning experiences. Your participation in this study would be valuable to inform this study's goal and the greater body of work in education.

The study is recruiting district leaders and school administrators who are associated with job-embedded teachers and/ or professional learning, and secondary teachers who are currently enrolled in a teacher education program, or will be in the next six months, to obtain licensure.

- **District leader and school administrator** participation involves the following:
 - A 30-minute interview over Zoom where you will be asked questions about your perceptions of the professional learning experiences of job-embedded teachers.
 - District leaders and school administrators will be asked to share Sending documents (calendars, handbooks, plans, etc.) that are associated with job-embedded teacher professional learning experiences tied to instruction.
- **Job-embedded teacher** participation involves the following:
 - A 30-minute interview over Zoom where you will be asked questions about your perceptions of the professional learning experiences of job-embedded teachers.

Your individual data will not be shared with your school or the school district.

This study has been approved by the University of Virginia Institutional Review Board Protocol # 6747 and the [Insert District Name] Research, Evaluation, and Assessment department to ensure ethical considerations are met for social science research.

If you have any questions about your rights as a research participant, you may contact me at bse6tx@virginia.edu. You may read more about this study on the attached information sheet.

Thank you very much for assisting me with this important study. If you wish to participate, please use this link [Insert Link] to sign up for a 30-minute interview.

Sincerely,

Catherine Ginel
School of Education, CISE
Bavaro Hall 213
PO Box 400273
417 Emmet Street S
University of Virginia
Charlottesville, VA 22903
Telephone: (434) 924-0742
bse6tx@virginia.edu

Appendix D

Study Information Sheet

Please read this study information sheet carefully before you decide to participate in the study.

Purpose of the research study: The purpose of this study is to better understand the perceptions of education leaders and job-embedded teachers of the professional learning experiences that help job-embedded teachers implement instructional practices. Specifically, this study aims to explore the following:

- The types, format, and structures of job-embedded professional learning experiences;
- Impressions of how well the professional learning experiences helped them implement instructional practices; and
- The needs that job-embedded teachers may have around early career professional learning tied to instruction, yet not received.

What you will do in the study: You will be interviewed over Zoom and asked questions about your perceptions of the professional learning experiences of job-embedded secondary teachers. This interview will be recorded to help ensure the accuracy of the transcript responses. You may skip a question, or you may decide to terminate the interview altogether if you do not wish to proceed. Additionally, district and school leaders are asked to share documents that are associated with professional learning that supports job-embedded teachers implement instructional practices.

Time required: The study will require about 30 minutes of your time.

Risks: There are no anticipated risks in this study.

Benefits: There are no direct benefits to you for participating in this research study. The study may help understand perceptions of education leaders and job-embedded teachers of the professional learning experiences that help job-embedded teachers implement instructional practices.

Confidentiality:

Findings will be reported in aggregate in the capstone report. All subjects, participants, schools, and the school system will be kept anonymous in any publication. A copy of the final capstone report will be shared with the school district per their research regulations.

Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report. After the interview concludes and I finish the transcript, then I will delete the recording of the interview.

In some cases, it may not be possible to guarantee confidentiality (e.g. an interview of a prominent person, a focus group interview). Because of the nature of the data, I cannot guarantee your data will be confidential, and it may be possible that others will know what you have reported.

Voluntary participation: Your participation in the study is completely voluntary. Your decision to participate will have no effect on employment.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty. If you choose to withdraw, your interview recording will be destroyed immediately.

How to withdraw from the study:

If you want to withdraw from the study, tell the interviewer to stop the interview. There is no penalty for withdrawing or withdrawing will not affect your experience as an employee. If you would like to withdraw after your materials have been submitted, please contact Catherine Ginel, the Principal Investigator.

Payment: You will receive no payment for participating in the study.

Using data beyond this study: The data you provide in this study will be retained in a secure manner by the researcher for 5 years and then destroyed.

Please contact the researchers on the study team listed below to:

- Obtain more information or ask a question about the study.
- Report an illness, injury, or other problem.
- Leave the study before it is finished.

Catherine Ginel, Principal Investigator
 [insert school name], [insert school address]
 [insert city, state, and zip code]
 Telephone: [insert phone number]
 bse6tx@virginia.edu or [insert work email]

Dr. Anne Jewett
 University of Virginia, Bavaro Hall 329, PO Box 400273
 417 Emmet Street S, Charlottesville, VA 22903
 Telephone: (434) 924-0742
 bar2h@virginia.edu

You may also report a concern about a study or ask questions about your rights as a research subject by contacting the Institutional Review Board listed below.

Tonya R. Moon, Ph.D.
 Chair, Institutional Review Board for the Social and Behavioral Sciences
 One Morton Dr Suite 400
 University of Virginia, P.O. Box 800392
 Charlottesville, VA 22908-0392
 Telephone: (434) 924-5999
 Email: irbsbshelp@virginia.edu
 Website: <https://research.virginia.edu/irb-sbs>
 Website for Research Participants: <https://research.virginia.edu/research-participants>

UVA IRB-SBS # 6747

You may print this copy for your records.

Appendix E

Semi-Structured Interview Protocol for the District Leader

Section 1: Introduction

- I am working on my doctoral capstone project and would like to talk to you about the professional learning experiences of job-embedded teachers. In particular, I would like to ask you about your perceptions of the professional learning experiences provided to job-embedded teachers by the school and district. I will start by asking some questions about your background before asking about professional learning specifically.
- I would like to express that you do not have to answer every question. You may skip a question, or you may decide to terminate the interview altogether if you do not wish to proceed. There will be no negative consequences to any skipped questions or if you wish to terminate the interview. Participation in this study is voluntary.
- I will be recording this interview using an AI program on an electronic device. This will help me ensure the accuracy of the transcript responses. I can stop the recording at any time if you request. After the interview concludes and I finish the transcript, then I will delete the recording of the interview. The transcript will be de-identified and kept in a secure file for use on my capstone project, and your data will be kept confidential. Do I have consent to record this interview?
- I anticipate that this interview will take approximately 30 minutes to complete.
- Do you have any questions before we begin?

Section 2: Demographics

1. How long have you been in your position?
2. What roles in education have you had before this position?
3. Can you describe your role and responsibilities specifically related to job-embedded teachers?

Section 3: Content

4. What thoughts do you have about job-embedded educator preparation programs in general and the candidates produced through this pathway to teaching?
5. What do you think are the different professional learning needs tied to instruction of job-embedded teachers at institutes of higher education-based (ex. [insert local institute of higher education]) as compared to those at non-institutes of higher education-based

education preparation programs ([insert district name]' District Educator Preparation Program)?

6. Within [insert district name], can you describe professional learning experiences provided to job-embedded candidates by the district that helped them to implement instructional practices?
7. Approximately how much time during the school day or outside of school did job-embedded teachers or their facilitators spend on these professional learning activities?
8. How do you think these professional learning activities did or did not help implement instructional practices?
9. If you had to prioritize the top three professional learning activities to help job-embedded teachers implement instructional practices - either that the district did or should do - what would that list be?
10. Is there anything else you would like to share about the district-based professional learning tied to instruction for job-embedded teachers?

Section 4: Closing

- Thank you for your time today to discuss job-embedded teachers. I appreciate your insights. If you think of anything else you would like to share, please feel free to contact me at [insert email address].

Appendix F

Semi-Structured Interview Protocol for Secondary Principals

Section 1: Introduction

- I am working on my doctoral capstone project and would like to talk to you about the professional learning experiences of job-embedded teachers. In particular, I would like to ask you about your perceptions of the professional learning experiences provided to job-embedded teachers by the school and district. I will start by asking some questions about your background before asking about professional learning specifically.
- I would like to express that you do not have to answer every question. You may skip a question, or you may decide to terminate the interview altogether if you do not wish to proceed. There will be no negative consequences to any skipped questions or if you wish to terminate the interview. Participation in this study is voluntary.
- I will be recording this interview using an AI program on an electronic device. This will help me ensure the accuracy of the transcript responses. I can stop the recording at any time if you request. After the interview concludes and I finish the transcript, then I will delete the recording of the interview. The transcript will be de-identified and kept in a secure file for use on my capstone project, and your data will be kept confidential. Do I have consent to record this interview?
- I anticipate that this interview will take approximately 30 minutes to complete.
- Do you have any questions before we begin?

Section 2: Demographics

1. What is the school name that you serve?
2. How long have you been in your position?
3. What roles have you had before this position and how long have you been in those roles?

Section 3: Content

4. What thoughts do you have about job-embedded educator preparation programs in general and the candidates produced through this pathway to teaching?
5. What do you think are the different professional learning needs tied to instruction of job-embedded teachers at institutes of higher education-based (ex. [insert local institute of higher education]) as compared to those at non-institutes of higher education-based

education preparation programs ([insert district name]' District Educator Preparation Program)?

6. Within [insert school name], can you describe professional learning experiences provided to job-embedded candidates by the district that helped them to implement instructional practices?
7. How much time during the school day or outside of school did job-embedded teachers or their facilitators spend on these professional learning activities?
8. How do you think these professional learning activities did or did not help them to implement instructional practices?
9. If you had to prioritize the top three professional learning activities to help job-embedded teachers implement instructional practices - either that the school did or should do - what would that list be?
10. Is there anything else you would like to share about the school-based professional learning for job-embedded teachers?

Section 4: Closing

- Thank you for your time today to discuss job-embedded teachers. I appreciate your insights. If you think of anything else you would like to share, please feel free to contact me at [insert email address].

Appendix G

Semi-Structured Interview Protocol for Job-Embedded Secondary Teachers

Section 1: Introduction

- I am working on my doctoral capstone project and would like to talk to you about the professional learning experiences of job-embedded teachers. In particular, I would like to ask you about your perceptions of the professional learning experiences provided to job-embedded teachers by the school and district. I will start by asking some questions about your background before asking about professional learning specifically.
- I would like to express that you do not have to answer every question. You may skip a question, or you may decide to terminate the interview altogether if you do not wish to proceed. There will be no negative consequences to any skipped questions or if you wish to terminate the interview. Participation in this study is voluntary.
- I will be recording this interview using an AI program on an electronic device. This will help me ensure the accuracy of the transcript responses. I can stop the recording at any time if you request. After the interview concludes and I finish the transcript, then I will delete the recording of the interview. The transcript will be de-identified and kept in a secure file for use on my capstone project, and your data will be kept confidential. Do I have consent to record this interview?
- I anticipate that this interview will take approximately 30 minutes to complete.
- Do you have any questions before we begin?

Section 2: Demographics

1. What grade level and subject(s) do you teach?
2. How long have you been in your position?
3. What roles, in education or non-education fields, have you had before this position?
4. Are you enrolled at [insert institute of higher education name] or [insert district name] educator preparation program?

Section 3: Content

5. Can you describe the professional learning you specifically received from the district or school that helped you to implement instructional practices?
6. How much time during the school day or outside of school did you spend on these professional learning activities?

7. How do you think these professional learning activities did or did not help you to implement instructional practices?
8. What do you wish you had received in professional learning to help you implement instructional practices?
9. If you had to prioritize the top three professional learning activities tied to instruction - either you received or wish you had received - what would that list be and why would you select those items?
10. Is there anything else you would like to share about the school or district professional learning tied to instruction for job-embedded teachers?

Section 4: Closing

- Thank you for your time today to discuss job-embedded teachers. I appreciate your insights. If you think of anything else you would like to share, please feel free to contact me at [insert email address].

Appendix H
Document Analysis Protocol

Document Title	
Document Format	
Document School	

Component	Questions
Alignment	How is the document aligned to providing professional learning to job-embedded teachers on instructional practices?
Structure	What is the structure or format of the program described by the document?
Model	How does the document align with a professional learning model?
Features	What features of the document are aligned with effective professional learning characteristics?

Appendix I

Data Management Plan

The research project described in this data management plan (DMP) will include qualitative data and will be available for sharing in aggregate form. Any individual-level data will be de-identified before sharing. Participant demographic data will be shared at an aggregated level to maintain confidentiality. All subjects, teachers, schools, and the school system will be kept anonymous in any publication.

Data Types and Storage

The types of data generated and/or used in this project include qualitative data from teacher and principal-level data collection including:

- a. Data collected from interviews by the researcher with participants and from document analysis.
- b. Data will be collected in the form of audio recordings, field notes, and transcribed teacher and education leader responses to interview questions.
- c. Data will be coded using qualitative methods.
- d. Data collection will be collected using a spreadsheet to note the interviewer, date of interview, reflection, coding dates, and file name/link to the document.
- e. Data will not be reproducible and data files will be kept separate from participant identifier data. Data files and participant identifier data will be password-protected.
- f. Data is expected to include 12 participant interviews over 3 months.
- g. Data will be stored and backed up to the university Google Drive system with password protection.

Data Organization and Documentation

The plan for organizing, and documenting data includes the following:

- a. The directory naming convention will include folders for participant data, participant consent forms, observation protocol, interview protocol, interview field notes, document protocol, interview reflection, and document reflection.
- b. The file naming convention for interviews will follow the model
SchoolName_ParticipantNumber_Year.Month.Day_InterviewerInitials.docx.
- c. Pseudonyms for the school name will be used, and a numbering system for the participants will be used.

Data Access and Intellectual Property

The data have the following access and ownership concerns:

- a. The data will be password-protected. Interview and document records will be kept separate from participant identifiers.
- b. Data will only be accessible and controlled by the researcher.

Data Sharing and Reuse

The data will be released for sharing in the following way:

- a. Data will not be shared outside of the researcher.
- b. Data will be de-identified for publishing in the researcher's capstone.
- c. Excel will be used to organize, sort, and codify the data.

Data Preservation and Archiving

The data will be preserved and archived in the following way:

- a. Data will be archived for preservation for 4 years, or the duration of the researcher's doctoral program. It will be preserved for long-term access for ten years.
- b. File formats will be retained in .xlsx, .docx, or .pdf formats for long-term access.
- c. The researcher will maintain the long-term data.

Appendix J

Sample Excerpt from Document Analysis

Document number	Document title	Format	School	How is the document aligned to providing professional learning to job-embedded teachers on instructional practices?	What is the structure or format of the program described by the document?	How does the document align with a professional learning model?	What features of the document are aligned with effective professional learning characteristics?
1	District learning days plan for 2024-2025	Electronic document	Pooley County Schools	<ul style="list-style-type: none"> - Identifies one of the district's key priorities, Great Educators at Every School, as the focus for the work of a new district initiative termed Teach Pooley. 	<ul style="list-style-type: none"> - The format is in-person and throughout the school year on three specific days. One day is before students start school, but it is during the teacher in-service week. The second day is on election day, and the third day is on President's Day. Election day and President's Day are student holidays. - Teachers will be divided by content areas across the district. Specific content areas and grade bands will convene at school locations for the district learning days. - The August district and learning day accounts for a half day of the county providing training to new teachers (new to the county, profession, or job-embedded). This document does not provide specifics on what those individuals will be doing during that half day. 	<ul style="list-style-type: none"> - The vision of district learning days is presented in a graphic to show the district vision, the alignment of regional and school context to that vision, and the focus of how that professional learning applies to an individual classroom. This displays a multi-layer approach to understanding the complexities of districts, schools, and classrooms. However, the graphic does not include the individual teacher as a lever of that professional learning. Yet, the appearance seems to be that the vision of Great Educators at every school will be achieved through this professional learning process. 	<ul style="list-style-type: none"> - Collaboration between teachers and with principals - Formatted in alignment with a process for teacher changes to instructional practice through the yearlong plan. - Facilitator support through content area supervisors

Appendix K

Codebook

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
Adult learning features	Autonomy	Participants describe a PLE that allows them to be self-directed learners.	Include if the participant describes a PLE that had some form of self-direction or selection.	Exclude if the participant describes a PLE that was not selected by them.	I chose to participate in a workshop to learn classroom management routines.
Adult learning features	Individual reflection	Participants describe PLE that require them to have self-reflection.	Include if the participant describes how they reflected on their learning to apply to teaching.	Exclude if the participant does not describe a formal or informal reflection on the PLE.	I reviewed classroom management routines and thought about what might work in my classroom.
Adult learning features	Facilitator supported	Participants describe a PLE that is led or guided by a facilitator.	Include if the participant describes a PLE that is facilitator led or guided.	Exclude if the participant engages in the PLE without a facilitator.	The instructional coach led the workshop on classroom management routines.
Adult learning features	Immediate use	Participants describe a PLE that they could immediately use in their classroom.	Include if the participant describes how the PLE was immediately applicable or used.	Exclude if the participant states that the PLE was not applicable or easily implemented.	I used the classroom management routines the next day in my classroom.
Adult learning features	Self-efficacy	Participants describe seeking out information on their own to address a perceived problem.	Include if the participant describes how a job-embedded teacher sought out a solution.	Exclude if the participant states that they were presented with a solution.	I found a teacher whose instructional practices I wanted to adopt and utilize.
Areas to grow	Need assessment	Participants describe how PLE offerings can support assessment practices	Include if the participant describes how a PLE could support assessment.	Exclude if the participant does not identify an assessment practice.	I think that job-embedded teachers would benefit from learning about formative assessment practices.
Areas to grow	Need classroom management	Participants describe job-embedded teachers needing support in	Include if the participant describes that job-embedded teachers	Exclude if the participant describes a PLE that did not provide	I wish that I had more support in specific classroom management

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
		classroom management	need more support in classroom management.	classroom management support.	routines and procedures.
Areas to grow	Need collaboration between schools and EPPs	Participants describe needing collaboration between schools and EPPs	Include if the participant describes that job-embedded teachers would benefit from collaboration between schools and EPPs.	Exclude if the participant describes collaboration between the job-embedded teacher and principal.	It would be helpful if there was more collaboration between schools and EPPs.
Areas to grow	Need evaluation understanding	Participants describe job-embedded teachers needing an understanding of evaluation	Include if the participant describes that job-embedded teachers need an understanding of evaluation.	Exclude if the participant describes a PLE that did not provide evaluation support.	I wish that I had training in understanding the evaluation process.
Areas to grow	Need mentorship	Participants describe providing mentorship to job-embedded teachers	Include if the participant describes how mentorship would benefit job-embedded teachers.	Exclude if the participant describes supervisory evaluation.	Job-embedded teachers would benefit from regular mentorship in their building and from the district.
Areas to grow	Need pedagogy	Participants describe job-embedded teachers needing support in pedagogy	Include if the participant describes that job-embedded teachers need more support in pedagogy.	Exclude if the participant describes a PLE that did not provide pedagogy support to them.	I wish that I had more support in specific pedagogical skills.
Areas to grow	Need policy and procedure knowledge	Participants describe job-embedded teachers needing support in policy and procedure knowledge	Include if the participant describes that job-embedded teachers need more support in policy and procedure knowledge.	Exclude if the participant describes a PLE that did not provide policy and procedure support to them.	I wish that I had more support in specific policy and procedure knowledge.
Areas to grow	Need technology skills	Participants describe job-embedded teachers needing support in technology skills	Include if the participant describes that job-embedded teachers need more support in	Exclude if the participant describes a PLE that did not provide technology skill support.	The technology pieces can be overwhelming to a new teacher to learn and utilize.

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
			technology skills.		
Clinical approach	Aligned coursework to field experience	Participants describe a PLE that was aligned to their coursework.	Include if the participant connects the PLE to coursework EPP learning.	Exclude if the participant states that the PLE was not aligned with what they learned in EPP coursework.	The workshop on classroom management routines matched some of the pedagogy routines I learned in my coursework.
Clinical approach	Not aligned coursework to field experience	Participants describe a PLE that was not aligned to EPP coursework.	Include if the participant identifies a practice that does not connect to the EPP.	Exclude if the participant states that the PLE was aligned with what they learned in EPP coursework.	The EPP has teachers write lesson plans but those are no longer necessary in practice due to HQIM.
Clinical approach	Feedback provided	Participants describe a PLE that provided them with feedback from the facilitator, mentor, or supervisor.	Include if the participant shares a PLE that provides feedback.	Exclude if the participant states that the PLE did not provide feedback.	I received feedback from my mentor about the classroom management routine that I implemented.
Clinical approach	Partnership between EPP and field or work experience	Participants describe a PLE that was connected with the EPP.	Include if the PLE was connected to the EPP.	Exclude if the PLE was not connected to the EPP.	The facilitator led a PLE that was co-sponsored by an EPP.
Collaboration	Teacher-teacher collaboration	Participants describe a PLE that included collaboration between teachers.	Include if the PLE included a collaborative component between teachers.	Exclude if the PLE did not include collaboration between teachers.	I was able to review my classroom management strategies with another teacher.
Collaboration	Teacher-administrator collaboration	Participants describe a PLE that included collaboration between teachers and administrators.	Include if the PLE included a collaborative component between teachers and administrators.	Exclude if the PLE did not include collaboration between teachers and administrators.	I was able to review my classroom management strategies with an administrator.
Collaboration	Importance to education leaders	Participants describe how education leaders supported the	Include if the participant describes how education leaders	Exclude if the participant does not identify how education	My principal attended the activity and gave perspective from the

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
		importance of PLE.	supported PLE.	leaders supported PLE.	building level.
Collaboration	PLCs	Participants describe how they collaborate through PLC structures.	Include if the participant describes working in PLCs to implement learning.	Exclude if the participant identifies implementing the learning individually.	We talked about the classroom management strategies in the PLC the following week.
Developing skills	Build pedagogical skills	Participants describe how they learned new pedagogical skills in the PLE.	Include if the participant describes a PLE that builds their pedagogy, or instructional practice.	Exclude if the participant describes learning policy and procedure.	I learned how to use the CER writing strategy for scientific writing.
Developing skills	Build technology skills	Participants describe how they learned new technology skills in the PLE.	Include if the participant describes a PLE that builds their technology skills to deliver instruction.	Exclude if the participant describes learning a technology not tied to instruction.	As a learner in the EPP, I submitted assignments to Canvas which is the same way that my students submit work.
Developing skills	Policy and procedure knowledge	Participants describe a PLE associated with policies or procedures.	Include if the participant describes a PLE that builds their knowledge of school and classroom policies or procedures.	Exclude if the participant describes learning an instructional strategy associated with classroom content.	I learned how to enter grades in the school's grading system.
Developing skills	Facilitate classroom management	Participants describe a PLE associated with learning classroom management routines.	Include if the participant describes a PLE that builds their knowledge of classroom routines.	Exclude if the participant describes learning an instructional strategy associated with classroom content.	I learned how to use popsicle sticks to randomly call students' names.
Education leaders' perspectives of job-embedded teachers	Positive perception by education leader	Participants describe a positive perception of job-embedded teachers and EPPs.	Include if the participant shares a positive impression of job-embedded teachers.	Exclude if the participant shares a negative impression of job-embedded teachers.	I was impressed that the teacher could use her accounting career knowledge and apply it to the classroom and teaching.
Education leaders' perspectives of job-embedded teachers	Negative perception by education leader	Participants describe a negative perception of job-embedded teachers and EPPs.	Include if the participant shares a negative impression of job-embedded teachers.	Exclude if the participant shares a positive impression of job-embedded teachers.	Job-embedded teachers come to us with no classroom management knowledge, and that

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
teachers					becomes evident in their lack of classroom discipline.
Format and structure	Professional learning models	Participants describe a PLE that is aligned with a K-12 professional learning model.	Include if the participant describes structures or a sequence of changes including changing teachers' knowledge, attitudes, or beliefs; change in instructional practice; or change in student learning.	Exclude if the participant does not describe how the PLE was organized as sequential learning.	I participated in a workshop that caused me to question my teaching of writing. I learned some new strategies that I then used with students, and I saw changes in student learning outcomes.
Format and structure	Process for teacher changes to instructional practice	Participants describe how having time to learn was important to the PLE.	Include if the participant describes the amount of time for the PLE.	Exclude if the participant does not address the time allotted for the PLE.	I found that having weekly check-ins with the workshop group was valuable to my learning.
Format and structure	Through instructional coaching	Participants describe a PLE with an instructional coach or coaching cycle.	Include if the participant describes an instructional coach or coaching cycle.	Exclude if the PLE is offered to all faculty or not part of instructional coaching.	New teachers are paired with an instructional coach to learn effective teaching strategies and classroom routines.
Format and structure	Through mentoring or induction	Participants describe a PLE within a mentoring or induction program.	Include if the participant describes a mentoring or induction program as the provider or associate of a PLE.	Exclude if the PLE is offered to all faculty or not part of a mentoring or induction program.	The workshop offered on state assessments was part of the school's mentoring program.
Format and structure	Embedded in school day or PLC	Participants describe participating in a PLE within the school day or PLC.	Include if the participant describes participating in a PLE during the school day, or on-contract hours.	Exclude if the participant describes participating in a PLE on non-contract hours (evenings, weekends).	Our workshop met the first PLC of each month for the year.

Categories	Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
Instructional practices	Instructional Practice	Participants describe a PLE ⁸ that allows them to learn instructional practices.	Include if the participant describes a PLE that helped them learn an instructional practice that is useful and effective.	Exclude if the participant describes a PLE that onboards them to human resources benefits or onboards the teacher to school policy.	The instructional coach created a workshop series for job-embedded teachers on cold calling.

⁸ PLE is used to abbreviate 'professional learning experiences.'

Appendix L

Excerpt of Interview Coding

File	Location	Time	Coding	Text
Transcript_School_SHHSP_7.29.24	9	00:01:51.905 --> 00:01:55.050		CG> So from your seat, what do you think are the different professional learning needs tied to instruction of job embedded teachers who are coming from institutes of higher education as compared to district EPP job-embedded teachers?
Transcript_School_SHHSP_7.29.24	10	00:02:25.085 --> 00:02:30.608		SHHSP> So in hearing your question and well, and we're talking, let me ask a clarifying question. You want to talk about student needs, student issues. Repeat question?
Transcript_School_SHHSP_7.29.24	11	00:02:40.085 --> 00:02:42.115		CG> So specifically tied to instruction. So, instructional practices, what needs do you see between these two groups of teachers?
Transcript_School_SHHSP_7.29.24	12	00:02:50.435 --> 00:02:52.480	Self-efficacy	SHHSP> That's a great question, because now I'm looking through and thinking so honestly those people coming straight from industry there, there's a difference. I think people come straight from industry and straight from academia. Typically, when we get a job-embedded placement from UT Knoxville or a higher institution, those students are coming for more of an academic background. Possibly a four-year degree, usually a four-year degree already. Maybe they're having a master's degree and they're going back to go into education, it's a little bit different than those that may not have had a degree, they just have experience in industry, a construction teacher or something like that. And so, there's a difference there in academia is background knowledge as far as comfort level and classrooms. Umm, but I go back to it's largely candidate dependent. Again, when you start talking about instructional practices, I'm not sure one is better than the other. Umm, because both the biggest challenge any job embedded teacher is gonna have is classroom management right off the bat. And then how do I engage students for a certain period of time at a high level and I think that all those job embedded people, job placement have those same struggles. I do think that the ones that go into UTK or a higher end higher education generally have more of an academic background and will be quicker to adapt to a good instruction.

File	Location	Time	Coding	Text
Transcript_School_SHHSP_7.29.24	12	00:02:50.435 --> 00:02:52.480	Need classroom management	SHHSP> That's a great question, because now I'm looking through and thinking so honestly those people coming straight from industry there, there's a difference. I think people come straight from industry and straight from academia. Typically, when we get a job-embedded placement from UT Knoxville or a higher institution, those students are coming for more of an academic background. Possibly a four-year degree, usually a four-year degree already. Maybe they're having a master's degree and they're going back to go into education, it's a little bit different than those that may not have had a degree, they just have experience in industry, a construction teacher or something like that. And so, there's a difference there in academia is background knowledge as far as comfort level and classrooms. Umm, but I go back to it's largely candidate dependent. Again, when you start talking about instructional practices, I'm not sure one is better than the other. Umm, because both the biggest challenge any job embedded teacher is gonna have is classroom management right off the bat. And then how do I engage students for a certain period of time at a high level and I think that all those job embedded people, job placement have those same struggles. I do think that the ones that go into UTK or a higher end higher education generally have more of an academic background and will be quicker to adapt to a good instruction.
Transcript_School_SHHSP_7.29.24	12	00:02:50.435 --> 00:02:52.480	Need pedagogy	SHHSP> That's a great question, because now I'm looking through and thinking so honestly those people coming straight from industry there, there's a difference. I think people come straight from industry and straight from academia. Typically, when we get a job-embedded placement from UT Knoxville or a higher institution, those students are coming for more of an academic background. Possibly a four-year degree, usually a four-year degree already. Maybe they're having a master's degree and they're going back to go into education, it's a little bit different than those that may not have had a degree, they just have experience in industry, a construction teacher or something like that. And so, there's a difference there in academia is background knowledge as far as comfort level and classrooms. Umm, but I go back to it's largely candidate dependent. Again, when you start talking about instructional practices, I'm not sure one is better than the other. Umm, because both the biggest challenge any job embedded teacher is gonna have is classroom management right off the bat. And then how do I engage students for a certain period of time at a high level and I think that all those job embedded people, job placement have those same struggles. I do think that the ones that go into UTK or a higher end higher education generally have more of an academic background and will be quicker to adapt to a good instruction.

Appendix M

Sample of Reflective Journal

Sawyer Hill High School Principal, James Alden 7.29.24

- Initial takeaways from the interview
 - James had the following feeling about job-embedded teachers:
 - Positive about the job-embedded programs, and he felt that of particular importance was the reality that many individuals cannot pause their career to return to school to earn a degree. The job-embedded program allows teachers to earn a living while in school.
 - Need classroom management skills since many are coming from backgrounds that are not familiar with schools and school structures.
 - Need pedagogical skills to develop student engagement and positively impact student learning.
 - Job-embedded teachers need to be self-starters and seek out information, be motivated to improve, and self-efficacious
 - James felt the following ways about EPPs:
 - Non-IHE based and IHE-based job-embedded teachers have the same challenges
 - James felt that the following activities benefitted job-embedded teachers:
 - Strong instructional coaching that is intensive at the start of the job-embedded teacher's job
 - James felt that job-embedded teachers needed to learn the following:
 - Classroom management to conduct lessons in which students are engaged and learning
 - Pedagogical skills to facilitate thinking, questioning, and problem solving
 - Assessment skills to implement formative and summative assessments to make decisions about instruction
 - School leader areas of emphasis or concerns:
 - Does not use the district supports from facilitators; prefers to use their in-house instructional coaching program
- Potential biases
 - I serve the middle school that feeds to this high school, so I have a bit more familiarity with their programming than other schools. However, I do not know details of their professional development and instructional coaching programs. Thus, I do not feel that I have any bias to the data collected from the interview.
- Researcher wonderings
 - I wonder how the focus on in-house strategies benefits or detracts from the overall job-embedded teachers in that school and if there is a difference in those schools without those supports.

Appendix N

Sample Analytic Memo

Research Questions

- RQ1: How do job-embedded secondary teachers in years 0-3 of their teaching career perceive professional learning experiences that help them to implement instructional practices in Region A of Pooley County Schools?
- RQ2: How do education leaders perceive the professional learning experiences that help job-embedded secondary teachers implement instructional practices in Region A of Pooley County Schools?

Interview of Grace Morgan, district leader of teaching and learning 6.26.24

My initial thoughts about the interview include that Participant 1 is a district-level leader with core content insights. She understands the district's needs yet identifies differences between IHE and non-IHE-based job-embedded teachers. However, she did routinely identify that all job-embedded teachers have specific professional learning needs: 1) pedagogy supports translating teaching to learning, 2) understanding assessment of and for learning, and 3) how to create a classroom “ecosystem” with norms and routines to build rapport with students. She noted that the IHE-based job-embedded teachers appear to have less support than the district-based teachers because the district employs an individual who works directly with district teachers. That individual can directly provide feedback and act as a routine access point for those teachers more so than what is provided for IHE-based teachers. She felt that we could improve our practices by providing instructional coaching cycles, content-specific cohorts of individual teachers, and support that included video-taping lessons and receiving feedback. Teachers receive support through the district EPP, DLD, and facilitators. At this time, teachers may only receive 6-12 touchpoints a year with a facilitator, and most of those are teacher-driven, so there is not a widespread ability for these job-embedded teachers to receive district support.