

Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally
Licensed Teachers

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Abstract

The purpose of this study was to examine elementary school leaders' perceptions of the induction programming they provided provisionally licensed teachers. The research question guiding this study was: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers? The sub-question was: How do elementary school leaders differentiate induction support for provisionally licensed teachers? This research contributes to the literature by presenting school leaders' perceptions of induction support for a growing number of provisionally licensed teachers entering the teaching profession. Qualitative study data were collected from 15 elementary school leaders across Virginia using a demographic survey and semi-structured, one-on-one interviews. A data analysis of leaders' perceptions provided insight on support structures, leaders' responsibilities, and additional support needed for provisionally licensed teachers. The summarized findings indicate that elementary school leaders view mentoring, coaching, and peer observations as crucial support structures for provisionally licensed teachers. The research highlighted the significance of communication, resource management, and workload management in fulfilling school leaders' responsibilities toward these teachers. Further findings emphasized the importance of career development for support staff, fostering a supportive school and community environment, the need for enhanced division level support, and the necessity for targeted professional development aimed at provisionally licensed teachers. Implications included formalizing mentoring, coaching, and peer observation support, maintaining communication, allocating resources, and cultivating an inclusive school culture to support provisionally licensed teachers. The findings and implications may be helpful to school leaders planning induction support for provisionally licensed teachers.

General Audience Abstract

The purpose of this study was to examine elementary school leaders' perceptions of the induction programming they provided provisionally licensed teachers. This research contributes to the literature by presenting school leaders' perceptions of induction support for a growing number of provisionally licensed teachers entering the teaching profession. Qualitative study data were collected from 15 elementary school leaders across Virginia that pertained to the purpose and research questions using a demographic survey and semi-structured, one-on-one interviews. A data analysis of leaders' perceptions provided insight on support structures, leaders' responsibilities, and additional support needed for provisionally licensed teachers. Ten findings identified that elementary school leaders' perceived mentoring, coaching, and peer-observations as important induction support structures for provisionally licensed teachers. Other findings that pertained to school leaders' responsibilities included the importance of communication, resource management, and managing the workload and support for provisionally licensed teachers. The findings also identified career development of support staff, building a supportive school and community, the need for increased division level support, and targeted professional development for provisionally licensed teachers. Implications included formalizing mentoring, coaching, and peer observation support, maintaining communication, allocating resources, and cultivating an inclusive school culture to support provisionally licensed teachers. The findings and implications may be helpful to school leaders planning induction support for provisionally licensed teachers.

Dedication

I dedicate this dissertation to my husband, John, and our twin boys, Matthew and Andrew, for believing in me and for your constant support of this goal. John, without you and all your sacrifices none of this would be possible. Thank you for encouraging me and allowing me the time to complete this dissertation journey. Boys, I hope the completion of this dissertation proves that anything can be accomplished when you have the support of the ones you love. May Jesus go before you and be with you always. Ut Prosim, Go Hokies!

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Chapter 1: Introduction

Overview and Background

The purpose of this qualitative study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers. This study employed a basic qualitative research design to collect data from 15 elementary school leaders across Virginia using a demographic survey and one-on-one interviews.

The teacher shortage is a worldwide phenomenon that is predicted to continue as student populations and teacher turnover continue to rise (Casely-Hayford et al., 2022; See & Gorard, 2020). The Joint Legislative Audit and Review Commission (JLARC, 2022) reported that teachers are leaving the profession at a higher rate (12%), and teacher preparation program enrollments are down (15%) in comparison to the pre-pandemic averages. Approximately 90% of school divisions surveyed identified issues in hiring and retaining qualified teachers since the COVID-19 pandemic (JLARC, 2022). The teacher shortage is dire across the United States, and divisions in Virginia are being forced to find creative ways to fill teacher vacancies (Devier, 2019; Sutchter et al., 2019). Many divisions have turned to provisionally licensed teachers to fill vacancies (Devier, 2019; JLARC, 2022; Sutchter et al., 2019).

The need for teacher induction support is exacerbated by the increasing number of teachers entering the profession as provisionally licensed because “Virginia is relying more on teachers who are not fully qualified” or have gained certification through an alternative route (JLARC, 2022, p. 60). Research indicates that the school leaders’ induction support of a new teacher is critical to their success and can have a positive impact on teacher retention (Kamrath & Bradford, 2020; Mullen, 2025).

Statement of Problem

School divisions around the world, in the United States, and across Virginia are in a dire situation, with declining enrollments in traditional teacher preparation programs leading to a shortfall in qualified educators (Casely-Hayford et al., 2022; JLARC, 2022; See & Gorard, 2020; Sutchter et al., 2019; Mullen, 2025). To address vacancies, school divisions are increasingly hiring unlicensed or provisionally licensed teachers (Devier, 2019; JLARC, 2022). It is reported that in Virginia, approximately 90% of school divisions surveyed identified issues in hiring and retaining qualified teachers since the COVID-19 pandemic (JLARC, 2022). Research shows that the teacher supply from traditional teacher preparation programs has steadily declined to 35% since 2009 (Sutchter et al., 2016, 2019). In Virginia, from 2009 to 2022, enrollments in teacher preparation programs have dropped by one-third and 15% fewer teaching licenses were issued than prior to the pandemic (JLARC, 2022). The drop in enrollment means Virginia's teacher pipeline is not meeting the demand based on enrollment numbers (JLARC, 2022; Sutchter et al., 2019).

School divisions across the country have been forced to find creative solutions to fill teacher vacancies (Devier, 2019; JLARC, 2022; Sutchter et al., 2019). A common solution to this problem has been to hire unlicensed or provisionally licensed teachers (Casely-Hayford et al., 2022; Devier, 2019; JLARC, 2022; Sutchter et al., 2019). According to research, educators who have had little to no pedagogical training are more likely to struggle and quit after their first year of employment (Devier, 2019; Gray & Taie, 2015; Ingersoll et al., 2014; Sutchter et al., 2019). However, a vast amount of research indicates that a structured induction program enhances the instructional practices of a new teacher and can also improve teacher retention (Glazerman et al., 2010; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Mullen & Fallen, 2022; Mullen, 2025;

National Education Association, 2022; New Teacher Center, 2018). Furthermore, new teacher induction programming structures are standard for all new teachers; whether they completed a formal teacher preparation program or are provisionally licensed.

Significance of the Study

Supporting provisionally licensed teachers has become increasingly common due to the number of educators gaining certification through an alternative route (Devier, 2019; JLARC, 2022; Sutchter et al., 2019). Currently, there is limited research on how elementary school leaders implement research-proven induction practices for these provisionally licensed teachers.

Additionally, the literature does not discuss the time and level of support elementary school leaders are dedicating to the provisionally licensed teachers filling the gaps due to the teacher shortage. Therefore, the significance of this study is to promote the perceptions and experiences of elementary school leaders regarding the induction programming and support structures of provisionally licensed teachers. This study may also contribute to the literature regarding standard practices, areas of focus, successes and challenges, additional support or resources elementary school leaders identified, and if a differentiated approach to induction is beneficial in supporting provisionally licensed teachers. Finally, this study could raise awareness of the best practices for supporting provisionally licensed teachers to help retain these individuals and circumvent the growing number of teacher vacancies.

Purpose of the Study

The purpose of this qualitative study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers. By exploring their insights, the research aimed to uncover the challenges and successes these leaders encounter in implementing

effective induction practices. Additionally, the study sought to highlight the roles of school leaders in induction support. Ultimately, this study aimed to provide valuable information that could inform and enhance induction programs, benefiting both school leaders and provisionally licensed teachers alike.

Research Questions

The research question guiding this study was: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they provide provisionally licensed teachers? The sub-question was: How do elementary school leaders differentiate induction support for provisionally licensed teachers?

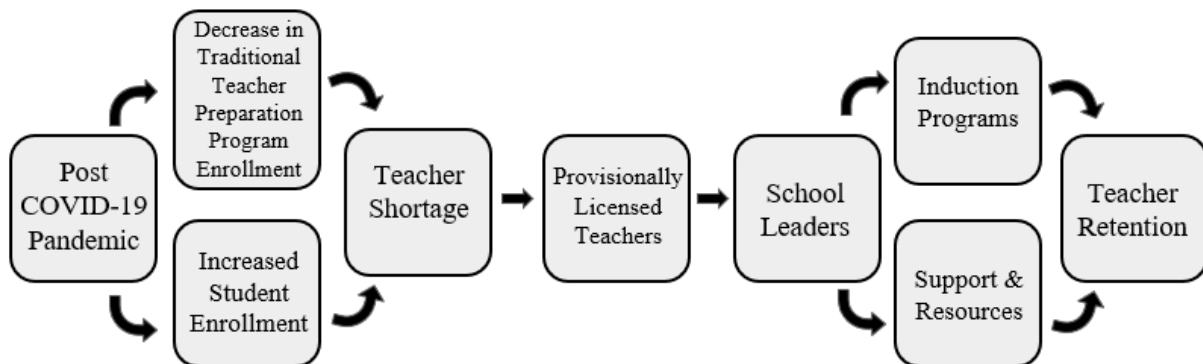
Conceptual Framework

Research shows that a school leadership's support for new teachers is critical to their success and their role in new teacher induction support is crucial (Kamrath & Bradford, 2020; Kutsyuruba et al., 2014; Mullen & Flanagan, 2023; Mullen, 2025). The New Teacher Center (NTC, 2018) provides a research-based framework for new teacher induction programs, which state that school leader engagement strengthens the effectiveness and success of new teachers. However, a vast amount of this research was conducted prior to when school divisions across the United States and Virginia relied heavily on hiring teachers with provisional licenses due to the ongoing teacher shortage (Devier, 2019; JLARC, 2022; Sutchter et al., 2019). Therefore, there is an increased need for new teacher induction support (Devier, 2019), and school leaders are primarily responsible in overseeing and the success of new teacher induction programming within their schools (Kamrath & Bradford, 2020; Kutsyuruba et al., 2014; NTC, 2018). The conceptual framework for this study (Figure 1) was formulated from themes that emerged from the literature review about the nationwide teacher shortage and school divisions' response to

solving this issue. A conceptual framework provides a picture of the principal elements to be explored in the research study and how they relate to one another (Roberts & Hyatt, 2019).

Figure 1.

Elementary School Leaders' Induction Support of Provisionally Licensed Teachers



Definition of Terms

The following list defines terms that were used to establish a common understanding of the terminology.

Certified Teacher

The Virginia Administrative Code defines *certified teachers* as educators who have “met all applicable state teacher certification requirements for a standard certificate” for a new teacher or one who has fulfilled the probationary term mandated by the state (as reported in JLARC, 2022; Virginia Department of Education, 2021).

Induction program

An *induction program* is defined as a structured and organized program of support and development that offers guidance and support for new teachers in the initial 1 to 3 years as professional educators (Huling-Austin, 1998; Ingersoll & Smith, 2004; LoCascio et al., 2016;

NTC, 2018). Induction programs vary in structure, formality, length, and components (Long et al., 2012).

High-Quality Teacher

A *high-quality teacher* usually possesses experience, a valid license to teach in the subject matter, and frequently a postgraduate degree (JLARC, 2022; Virginia Department of Education, 2021).

Mentor

A *mentor* is an experienced person who serves as a role model for new teachers. These veteran professionals provide support via guidance, encouragement, and counseling, as well as building relationships with new teachers (Mullen et al., 2022). Furthermore, mentors provide the new teachers with crucial support in assimilating to their new identity as professional educators (Huling-Austin, 1998; Ingersoll & Strong, 2011; Mullen et al., 2022; Richter et al., 2013; Virginia Department of Education, 2021).

New Teacher

New teacher refers to any educator in their first 2 to 3 years in the education profession (Gray & Taie, 2015; Ingersoll, 2012; NTC, 2018). They are commonly called “novice” or “beginning” teachers.

Provisionally Licensed Teacher

A *provisionally licensed teacher* is an individual who does not have an undergraduate degree in education from a teacher preparation program, holds a 3-year, non-renewable license, is hired into full-time teaching positions and builds classroom experience on the job, and has “allowable deficiencies for full licensure” (Devier, 2019; JLARC, 2022, p. 60; Virginia Department of Education, 2022).

Teacher Retention

Teacher *retention* is defined as teachers who choose to stay in the teaching profession past the induction period (Gray & Taie, 2015; Kang, 2011; Maready et al., 2021). It is commonly associated with the terms *attrition* and *turnover*, which refer to teachers who leave the profession or move to another school (Kang, 2011; Maready et al., 2021).

Teacher Shortage

Teacher shortage is defined as inadequate recruitment of new teachers based on the demand due to student enrollment and high teacher attrition (Sutcher et al., 2016, 2019).

Summary

This chapter provided the background and a brief overview of the study, including an explanation of the problem statement and the significance of the study. This also introduced the conceptual framework and ended with defining key terms. Chapter two examines current literature on the teacher shortage, the school divisions' response, and alternative pathways to teacher licensure.

Chapter 2: Review of Literature

The global staffing shortage is expected to persist due to the rising teacher attrition rates and the decrease in enrollments in teacher preparation programs (Casely-Hayford et al., 2022; JLARC, 2022; See & Gorard, 2020; Sutchter et al., 2019). School divisions across the United States and Virginia have turned to hiring non-highly qualified teachers (those with provisional or alternative licenses, to fill the gap (Devier, 2019; JLARC, 2022; Sutchter et al., 2019). Since the number of provisionally licensed teachers continues to grow (Devier, 2019; JLARC, 2022), examining how school leaders support this group of teachers is important. The purpose of this qualitative research study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers. This review examines current literature focusing on the teacher shortage and school divisions' response, alternative pathways to teacher licensure, key components of new teacher induction programs, and the school leaders' role in induction programming. This literature review aimed to gain insight into the school leaders' role in new teacher induction programming and whether there is a differentiated approach to induction support for provisionally licensed teachers.

Search Process

This literature review focuses on teacher attrition rates, provisionally licensed teachers, induction programs, and school leaders' roles in induction programming. Keywords used in these searches include the following: new or beginning or novice teacher, induction program, teacher retention, attrition or turnover, mentor, and provisional or alternative licensed teacher, school administrator or principal or leader. Searches were conducted from September 2021 to April 2024 using the EBSCOhost, Google Scholar, and the Education Resources Information Center

(ERIC) databases. All searches had the limiters of peer-reviewed journal articles from 2011 to 2024, except articles with historical information or public reports. Google Scholar, ERIC, and the Virginia Tech library website were used to locate articles and public research reports referenced in the articles reviewed. Table 1 organizes these search results.

Table 1

Search Criteria and Results

Search Term	And/Or	Search Term	And/Or	Search Term	Results
New Teacher	AND				27,153
Induction Programs	AND				3,599
New Teacher	AND	Induction Programs			247
New Teacher	AND	Retention			810
New Teacher	AND	Induction Programs	AND	Retention	36
New Teacher OR Beginning Teacher OR Novice Teacher OR First Year Teacher	AND	Teacher Retention OR Teacher Attrition OR Teacher Turnover			141
Provisionally Certified Teacher					24
Provisionally Certified Teacher	OR	Alternative Certified Teacher			10,965
Provisionally OR Alternative Certified Teacher	AND	New Teacher Induction			2
Provisionally OR Alternative Certified Teacher	AND	School Administrators OR Principal OR Leader			6,450
Provisionally OR Alternative Certified Teacher	AND	School Administrators OR Principal OR Leader			376
Provisionally OR Alternative Certified Teacher	AND	School Administrators OR Principal OR Leader	AND	New Teacher Induction	1

Overall, 40 articles and 5 public reports were reviewed for relevance to this literature review using the above keywords. The literature review table (Appendix A) organizes the

research, highlighting similar themes found in the literature. Additionally, two Virginia Tech dissertations were reviewed.

Synthesis of Literature

The following sections introduce the themes that emerged in the literature review process. The first section provides an overview of the historical aspect of the teacher shortage phenomenon, including pre- and post-pandemic research. The second section highlights the literature that explains the school divisions' response to the growing teacher shortage. The third section discusses literature on impactful induction program practices, challenges new teachers face, the effects of teacher turnover on student achievement, and the importance of mentoring. The last section accentuates the theme of the school leader's role in induction programs, as seen in the literature.

Teacher Shortage

There is an abundance of literature, comprised of articles and reports, documenting the worldwide teacher shortage (Bland et al., 2023; Carver-Thomas & Darling-Hammond, 2017; Devier, 2019; JLARC, 2022; Mullen, 2025; See & Gorard, 2019; Sutcher et al., 2016, 2019; Taie & Lewis, 2023; Zweig et al., 2021). States across America have commissioned task forces to study just how profound the teacher shortage is and to make recommendations to states on how to address this phenomenon (Bland et al., 2023; JLARC, 2022). Research differs on what constitutes a shortage which a myriad of factors can influence; however, current trends examine supply and demand (Sutcher et al., 2019). Therefore, teacher shortage refers to a gap in the quantity of qualified new teachers compared to the required number of positions to fill (Bland et al., 2023; JLARC, 2022; Sutcher et al., 2019).

Ongoing Issues of Teacher Attrition

The teaching profession encompasses approximately 4% of the civilian workforce (Ingersoll, 2003). Therefore, it is understandable that a profession this large would experience attrition, or turnover, at a higher level than other professions (Carver-Thomas & Darling-Hammond, 2017). Historically, teacher shortages have been prevalent, especially in math, science, and special education (Gardner, 1983). In *A Nation at Risk*, Gardner (1983) stated, “The shortage of teachers in mathematics and science is particularly severe.... Half of the newly employed mathematics, science, and English teachers are not qualified to teach these subjects” (p. 23). Additionally, Ingersoll (2003) reports that in the 1988-1989 school year, teaching experienced a high turnover attrition rate of 14.5%, which increased to 15.7% by the 2000-2001 school year. Fast forward to the period between 2008 and 2012, and the number of beginning teachers who left teaching went from 10% to 17% in 4 years (Gray & Taie, 2015). Additionally, in Title I schools, which serve socioeconomically disadvantaged students, teacher attrition rates are 50% higher (Carver-Thomas & Darling-Hammond, 2017). The academic research and numerous sources of data collected over the years demonstrate that the teacher shortage has been an ongoing challenge for some time (Carver-Thomas & Darling-Hammond, 2017; Garner, 1983; Gray & Taie, 2015; Ingersoll, 2003; Taie & Lewis, 2023).

Pandemic Impact on Teacher Attrition

Studies conducted during the COVID-19 pandemic exacerbated an already complex situation (e.g., Bland et al., 2023; JLARC, 2022; Mullen & Fallen, 2022; Mullen, 2025). In *Pandemic Impact on Public K–12 Education*, the JLARC (2022) reported that teacher vacancies doubled in over half of school divisions across Virginia since the 2021-2022 school year to approximately 3,500 vacancies across Virginia. Before the pandemic, the yearly gap in teacher vacancies was an average of 1,250. In the 2022-2023 school year, more than half of school

divisions did not feel confident they would be able to secure a stable and sustainable workforce before the beginning of the school year. In the 2021-2022 school year, 32% of Virginia school divisions experienced a considerable number, between 7% and 32%, of vacant teacher positions (JLARC, 2022).

Likewise, states like Texas and New York are experiencing the same levels of attrition (Bland et al., 2023; Zweig et al., 2021). In Texas, it was reported that 12% of teachers left the workforce in the 2021-2022 school year (Bland et al., 2023; Taie & Lewis, 2023). This statistic is a 25% increase compared to the years before the pandemic and larger than the national teacher attrition average of 8% (Bland et al., 2023; Taie & Lewis, 2023). New York State has also faced widespread teacher shortages, especially in hard-to-staff subjects and school divisions (Zweig et al., 2021). For this reason, educational policymakers continue concentrating on the issue of how to supply a sufficient number of qualified teachers to staff classrooms in schools serving underprivileged populations (Wilhelm et al., 2021). Although the reasons contributing to the teacher shortage are important, this literature review chose not to focus on the cause of the increase in teacher attrition but instead place focus on how school divisions across the United States and Virginia are filling these teacher vacancies.

Provisionally Licensed Teachers

The data agree that the problem of the worldwide teacher shortage is not ending; if anything, the data supports that this is a growing issue that is only getting worse (Bland et al., 2023; Carver-Thomas & Darling-Hammond, 2017; Devier, 2019; JLARC, 2022; See & Gorard, 2019; Sutchter et al., 2016, 2019; Zweig et al., 2021). However, this does not alleviate school divisions' obligation to place high-quality teachers in classrooms so students can receive quality instruction (Sutchter et al., 2016). According to the 2020-2021 Civil Rights Data Collection, 1%

of the United States total student enrollment attends public schools where less than half of the teachers are uncertified (United States Department of Education, 2023). Many school divisions have chosen to fill the increasing number of teacher vacancies with provisionally licensed teachers, also called alternatively licensed or uncertified teachers (Carver-Thomas & Darling-Hammond, 2017; Devier, 2019; JLARC, 2022; Sutchter et al., 2019). A teacher pursuing certification through alternative routes, or one holding an emergency, temporary, or provisional credential, is not considered to have met state requirements (Sutchter et al., 2016, p. 81) and is more likely to be less effective than a fully licensed teacher (JLARC, 2022). The teacher shortage has resulted in an increase in provisionally licensed teachers across the United States (Devier, 2019). In Virginia, 9.5% of all teachers are provisionally licensed, a 24% increase from pre-pandemic data, demonstrating that school divisions depend heavily on teachers who are not fully endorsed (JLARC, 2022).

Pathways to a Provisional License

Alternative certification programs were established in the mid-1980s to respond to the teacher shortage (Devier, 2019; Wilhelm et al., 2021). At that time, only eight states had alternative certification programs, but as these programs continued to grow in popularity, all states had some alternative certification program by 2008 (Devier, 2019). Throughout the United States, there are many pathways toward teacher certification/licensure, and each program's characteristics vary based on the state (Carver-Thomas & Darling-Hammond, 2017; Devier, 2019; LoCascio et al., 2016). The Every Student Succeeds Act (2015) gave state legislators the authority to establish certification and licensing standards. The requirement for alternative certification programs to train and produce effective teachers was accelerated by this legislation (Bland et al., 2023; Carver-Thomas & Darling-Hammond, 2017; Darling-Hammond, 2020). Despite

the decline in enrollment, the most common pathway to teacher licensure is still through a formal teacher preparation program (Constantine et al., 2009; Wilhelm et al., 2021).

A pathway to certification other than a formal teacher preparation program is considered an alternative (Carver-Thomas & Darling-Hammond, 2017; Constantine et al., 2009; Devier, 2019; JLARC, 2022; Sutchter et al., 2016; Wilhelm et al., 2021). Many alternative certification programs target career switchers with diverse experiences interested in entering the teaching profession but are not seeking another undergraduate degree (Wilhelm et al., 2021).

Nevertheless, there are significant differences in the kind of support and preparation offered by an alternative certification program compared to a traditional teacher preparation program (Wilhelm et al., 2021). Generally, teachers who gain certification through an alternative pathway need more experience and pedagogical coursework (Carver-Thomas & Darling-Hammond, 2017; LoCascio et al., 2016). Not only do these teachers experience a shorter on-ramp to teaching, more on-the-job training, and require more support when they first start teaching, but they also frequently finish their certification process while serving as the teacher of record (Wilhelm et al., 2021). Additionally, many teachers chose the alternative certification pathway because they cannot afford to be without an income while they complete a traditional teacher preparation program (Carver-Thomas & Darling-Hammond, 2017).

Effects on Student Achievement

Research shows that schools with a significant proportion of low-income, low-achieving, non-Caucasian students tend to have higher rates of provisionally licensed teachers due to teacher attrition (Cardichon et al., 2020; Carver-Thomas & Darling-Hammond, 2017; Darling-Hammond & Sykes, 2003; Muñoz et al., 2013; Ronfeldt et al., 2013). Furthermore, a negative correlation can be established between teacher attrition rates and low student academic

achievement based on test scores in reading and math (Cardichon et al., 2020; Ronfeldt et al., 2013; Sutchter et al., 2016). More than half of all provisionally licensed teachers are often placed in hard-to-staff, socially disadvantaged schools with the highest percentages of students of color and comprise 21% of the faculty (Cardichon et al., 2020; Carver-Thomas & Darling-Hammond, 2017; Spooner-Lane, 2017). This results in these novice teachers experiencing challenging classroom behaviors and increased stress due to additional administrative duties like data collection because, unlike teachers from traditional preparation programs, provisionally licensed teachers are inadequately prepared due to their inexperience and lack of depth in alternative certification requirements (Rose & Sughrue, 2021; Spooner-Lane, 2017).

Multiple studies have established a relationship between a teacher's quality characteristics (teacher education and licensing) and student academic achievement (Bland et al., 2023; Cardichon et al., 2020; Carver-Thomas & Darling-Hammond, 2017; JLARC, 2022). Students whose teacher did not hold a degree or certification in the subject they taught did not show the same academic growth as a student whose teacher possessed a degree or certification in the same area of instruction (Darling-Hammond & Sykes, 2003; JLARC, 2022). This research demonstrates that a teacher's certification pathway impacts student learning (Darling-Hammond & Sykes, 2003; JLARC, 2022; Muñoz et al., 2013).

A meta-analysis study conducted by Whitford et al. (2018) examined over 700 studies conducted between 1998 and 2015 comparing alternatively licensed teachers and traditional teacher preparation programs and their effects on student academic achievement data. This meta-analysis found that students with teachers licensed through alternative certification had a slightly higher statistical significance achievement rate ($SD = 0.03$) than those with traditionally licensed teachers. However, when the results were analyzed by grade level or subject, there was no

statistical difference in student achievement for students at the elementary level in reading or math (Whitford et al., 2018). Even though the literature about the effects of alternatively certified teachers on student academic achievement varies, the literature does support that teacher retention in high-need, hard-to-staff schools can be achieved by offering quality induction support, mentorship, and other professional development opportunities to new teachers (Bland et al., 2023; Cardichon et al., 2020; Sutchter et al., 2016; Wilhelm et al., 2021).

New Teacher Induction Programs

Recognizing at the onset just how difficult teaching is impacts the high rate of new teacher turnover (Spooner-Lane, 2017; Stewart & Jansky, 2022; Warsame & Valles, 2018). New teachers rely heavily on their teacher preparation, including student teaching and teaching methods courses, once they begin working (Cardichon et al., 2020; Long et al., 2012; Stanulis et al., 2012). Moreover, new teachers often need support with managing stress, lesson planning, classroom management, and performing required administrative tasks (Ingersoll & Strong, 2011; Mullen & Fallen, 2022). Given the short pre-service preparation of provisionally licensed teachers, coupled with the challenges of navigating an alternative licensure program, the need for formal induction support is critical to their success and development (Glazerman et al., 2010; LoCascio et al., 2016; Wilhelm et al., 2021). The purpose of induction programs is to enhance the performance of newly hired educators and raise teacher retention by providing structured and targeted support (Bland et al., 2023; Glazerman et al., 2010; Huling-Austin, 1998; Ingersoll & Strong, 2011; Mullen, 2025; NTC, 2018; Warsame & Valles, 2018). A robust induction program helps new teachers adjust to the rhythm and organization of the school, fosters self-confidence, and encourages new teachers to remain in the division and the profession (Bland et al., 2014;

Glazerman et al., 2010; Huling-Austin, 1998; Ingersoll, 2012; Long et al., 2012; Mullen, 2025; Richter et al., 2013).

Induction Programs Policy and Governance

Studies indicate that impactful new teacher induction programs build strong and effective teachers, positively impacting student academic achievement (Glazerman et al., 2010; Hallam et al., 2012; Long et al., 2012). According to Goldrick (2016), only 29 states in the United States require the participation of their new teachers in an induction program. The policy from the Virginia Department of Education (VDOE, 2021) provides 10 guidelines for a new teacher mentoring program designed for all beginning and experienced teachers new to the state. This policy intends to support the advancement of all students' academic achievement in all schools, increase teacher effectiveness, and provide teachers with professional growth, which aims to help beginning teachers become successful educators. Additionally, the VDOE and the Virginia General Assembly allocate resources to support teacher professional development to increase teacher effectiveness and professional growth. However, the governance of which each division determines specific model or research-based mentoring program to implement. As a result, state and local school divisions are left to interpret and implement induction programs at their level (VDOE, 2021).

Induction Support Program Practices

Features of high-quality induction support programs for new teachers focus on the following practices: frequent association with a highly qualified, trained mentor; opportunities to observe exceptional teaching and to be observed; instructional coaching; classroom management strategies; collaborative teacher meetings; and school leader support (Bland et al., 2023; Mullen, 2025; Schatz-Oppenheimer, 2017; Wilhelm et al., 2021). The initiatives are essential in closing

the preparation gaps for provisionally licensed teachers (Bland et al., 2023). However, similar to how teachers differentiate instruction in order to meet every student's needs, the different experiences and skill sets of provisionally licensed teachers should also be considered in induction support. They should extend beyond their first year of teaching (Rose & Sughrue, 2021). These practices impact novice teachers when they directly address the challenges they face within their practice and classrooms (Rose & Sughrue, 2021).

The most well-researched induction support for new teachers is the topic of mentoring (Bland et al., 2014; Frels et al., 2013; Hallam et al., 2012; Kang, 2011; Kram, 1983; Mullen et al., 2022; Rose & Sughrue, 2021; Schatz-Oppenheimer, 2017; Whalen et al., 2019; Wilhelm et al., 2021). Structured induction programs are ineffective without strong mentors and a culture of supportive professionals (Hallam et al., 2012; Kang, 2011; Warsame & Valles, 2018). Schatz-Oppenheimer (2017) concluded that a strong and credible teacher mentor plays an essential role in the success and development of a new teacher by taking on the role and responsibility of being emotional and professional support. Thus, the foundation of serving as a mentor is building a relationship of mutual respect and trust and requires veteran teachers to set aside their personal opinions and beliefs to assist the new teacher in developing teaching as their craft (Kram, 1983; Mullen et al., 2022; Schatz-Oppenheimer, 2017; Whalen et al., 2019; Wilhelm et al., 2021). Mentors and new teachers also form a helping relationship, as the mentor is considered an expert in professional knowledge who helps the inexperienced new teacher (Schatz-Oppenheimer, 2017). This is why mentoring programs must exist separately from evaluative ones (Bland et al., 2014; Kang, 2011; Mullen, 2025). The non-evaluative aspect is essential to the effectiveness of the mentor/new teacher relationship and is fostered through multiple opportunities for interaction

and time (Bland et al., 2014; Kang, 2011; Mullen et al., 2022; Mullen, 2025; Schatz-Oppenheimer, 2017; Wilhelm et al., 2021).

Quality mentoring programs pair new teachers with a mentor teacher on the same grade level, increasing the new teacher's opportunities for personalized instructional coaching, observations, and modeling lessons (Cardichon et al., 2020). However, it should be noted that one of the challenges schools with a substantial number of provisionally licensed teachers often face is a disparity in the number of new teachers versus the supply of experienced mentor teachers prepared to assist in the induction support process (Cardichon et al., 2020). Considering that in some schools, 21% of the staff are provisionally licensed teachers, meeting the demand for quality mentor teachers can be difficult (Cardichon et al., 2020; Carver-Thomas & Darling-Hammond, 2017; Mullen & Flanagan, 2023). Nevertheless, the need for strong mentors is compelling because a positive correlation can be made between new teachers who receive induction mentor support and the decision to remain in their initial teaching assignment (Bland et al., 2014; Hallam et al., 2012; Ingersoll & Strong, 2011; Kang, 2011; Kutsyruba et al., 2014; Maready et al., 2021; Ronfeldt et al., 2013; Stanulis et al., 2012; Wilhelm et al., 2021).

Role of School Leadership in an Induction Program

The principal is the school's instructional leader and is often responsible for implementing the new teacher induction program (Rose & Sughrue, 2021; Wilhelm et al., 2020). "The principal's influence is undeniable- they are often the first leader novices meet and with whom they form a relationship. Principals should not simply default to mentoring services but rather play an active role" (Mullen & Fallen, 2022, p. 764). School leaders play a vital role in supporting new teachers, such as being approachable, offering resources, or offering guidance and mentorship (Frels et al., 2013; Wilhelm et al., 2021). These leaders often face tensions

between their responsibility to foster their new teacher's professional growth and serving in an administrative or evaluative capacity (Kutsyuruba et al., 2014).

Therefore, the school leaders' support and role in the induction program must be consistent and clearly defined as it is critical to the success of their new teachers (Kamrath & Bradford, 2020; Kutsyuruba et al., 2014). The direct support school leaders should provide includes overseeing collaborative planning, talking about curriculum or pedagogy, analyzing student academic data, and coordinating coverage for the mentoring pairs to complete observations of each other; all essential elements of a solid structured induction program (Frels et al., 2013; Mullen & Fallen, 2022; Walker & Kutsyuruba, 2019; Wilhelm et al., 2021). Walker and Kutsyuruba (2019) suggest giving school leaders a comprehensive monthly guide with insights and topics on implementing a structured and thorough new teacher induction program. Additionally, school leaders are encouraged to select mentoring pairs carefully, provide support and encouragement during the mentoring process, monitoring for any indications that a mentoring relationship is unproductive or failing. Research supports that the principal's support of shared leadership and delegating minor tasks of the mentorship program to a teacher leader positively impacted support of the new teacher induction program (Mullen & Flanagan, 2023; Walker & Kutsyuruba, 2019).

A school leader's commitment to induction support programming either supports and promotes retention or undermines it, resulting in teacher turnover (Walker & Kutsyuruba, 2019). This emphasizes school leaders' crucial role have in decreasing teacher turnover by overseeing their school's mentoring program (Kutsyuruba et al., 2014; Mullen & Fallen, 2022; Mullen, 2025). Additionally, school leaders should remember to utilize the varying experience and relatable skills that provisionally licensed teachers may possess (Mullen & Flanagan, 2023). In

2020, Kamrath and Bradford determined that inadequate administrative support contributed to the new teachers' decision to leave their position and professions. They also state that more than half of the participants indicated that more administrative support would have positively impacted on their decision to stay. These teachers, who decided not to return to their school or the profession, desired encouragement, assistance with student discipline, and support from their school leadership in situations dealing with parents (Kamrath & Bradford, 2020). The research supports that new teachers are more likely to remain at their assigned school when they receive targeted support from their mentors and leaders (Hallam et al., 2012; Kutsyuruba et al., 2014; Maready et al., 2021; Mullen & Fallen, 2022; Stanulis et al., 2012).

Summary

This chapter examined current literature focusing on the teacher shortage and school divisions' response, alternative pathways to teacher licensure, critical components of new teacher induction programs, and the school leaders' role in induction programming. The literature reviewed centered on induction support for new teachers. However, a notable gap exists regarding whether a differentiated approach for provisionally licensed teachers would enhance induction support, given that those who achieve certification through alternative pathways often bring significantly more diverse experiences compared to their counterparts on the traditional certification route. Chapter 3 outlines the study's purpose and explains the chosen research methodology, including the research questions, design, data collection, and analysis procedures.

Chapter 3: Methodology

Purpose and Research Questions

The purpose of this qualitative study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they provide provisionally licensed teachers. The research question guiding this study was: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers? The sub-question was: How do elementary school leaders differentiate induction support for provisionally licensed teachers? The research questions were developed to explore a gap in the literature regarding whether a differentiated approach for induction support was used to support provisionally licensed teachers.

Researcher Background and Assumptions

My interest in this topic stems from an experience a relative brought to my attention when she decided to shift her career track from social work to teaching. She has multiple graduate degrees in Social Work and Health Care Administration but had no experience teaching. I began wondering what type of induction support her school district would offer based on her education level and lack of teacher preparation program or field experience. I have taught elementary school in five different states (Texas, North Carolina, Kansas, Tennessee, and Virginia) and have experienced new teacher induction programs in most districts. After teaching for several years, I decided to pursue my degree in Administration and Supervision. In my current role as Assistant Principal, I was responsible for new teacher induction and support for several years. However, this responsibility is now placed on our Instructional Designer to help balance workloads. I assume there is value in differentiating the induction support for all new

teachers based on their education and experience working with students. Given my assumptions, I had to make a distinction between my perspective as a researcher and my perspective as an elementary school leader throughout the research process (Merriam & Tisdell, 2014). Peer coding and member checking were used to reduce bias and preserve the integrity of the study and its findings (Miles et al., 2020). All ethical standards and frameworks specified by my research design outlined in this chapter were adhered to throughout this study.

Limitations and Delimitations

A limitation of the research was that data were dependent on the participants' responses to the interview questions, which could be influenced by their own experiences or biases (Creswell & Poth, 2018). This is a limitation because it could lead to incomplete or distorted representations of their experiences (Creswell & Poth, 2018). Such biases could affect the accuracy of information provided, influence the findings, and limit the depth of understanding of induction support for provisionally licensed teachers (Merriam & Tisdell, 2014). To avoid this, member checking was completed by participants to verify the accuracy of the interpretations of their interviews (Lincoln & Guba, 1985).

One delimitation of the study was that all participants were elementary school leaders in Virginia, which could restrict the applicability of the findings to other educational settings across the world. By focusing solely on this specific demographic, the study provides valuable insights into the challenges and strategies unique to Virginia's elementary education system. However, the experiences and perspectives of school leaders in different states or at varying educational levels may differ due to diverse policies, cultural factors, and community needs. It may be beneficial to replicate the study with middle and high school leaders to further address the identified research gap.

Research Design

A basic qualitative design was selected for this study. According to Merriam and Tisdell (2016), basic qualitative studies are the most prevalent method of research to interpret participants' experiences, such as supporting the increasing number of provisionally licensed teachers filling vacancies due to the teacher shortage. The design was chosen to gain insight into the perceptions and experiences of elementary school leaders regarding induction programming and support they provide provisionally licensed teachers. A demographic survey and interviews were used to collect data from participants. Document analysis was a part of the original research design (Merriam & Tisdell, 2016). Study participants were asked to share induction support documents such as meeting agendas, collaborative or coaching conversation logs, or support plans for document analysis. A QuestionPro link was shared with participants multiple times throughout the research period. The link was shared when participants were invited to sign up for the research study. Additionally, participants were asked to provide attach supporting documents on the interview transcript approval email; however, no documents were provided by participants for analysis. The additional step and the time constraints on their schedules may have contributed to why participants did not provide support documents.

In qualitative research, the purposeful sampling method recruits individuals who meet predefined criteria that align with the purpose of a research study (Merriam & Tisdell, 2016; Patton, 2015). The target population for this research study was elementary school leaders across Virginia who support provisionally licensed teachers. Purposeful sampling which included snowball sampling was used to locate and select participants (Patton, 2015). A recruitment flyer containing desired participant criteria was shared via social media and at the Virginia Association of Elementary School Principals conference. The recruitment flyer contained a QR

code linked to the demographic survey. Once participants were identified and interviewed, snowball sampling was the primary source of participant recruitment (Patton, 2015). The last question of the interview asked participants to share the name and contact information of any elementary school leaders who met the criteria and would be willing to participate in the study. The snowball method acquired 11 of the 15 participants in the study.

Initially, demographic survey data were collected from participants. The survey included criterion and other research-specific questions such as building level, the number of provisionally licensed teachers the school leader supported, and the frequency and number of minutes per support session. From this data, participants who fit the study's criteria were contacted to schedule a semi-structured, one-on-one interview. Participants were elementary school leaders identified as principals, associate, and assistant principals who provide any level of induction programming and support to provisionally licensed teaching staff to fill teacher vacancies. These school leaders directly supported at least two provisionally licensed teachers who filled teaching vacancies within the past 2 years due to the teacher shortage.

Participants

Eleven elementary school principals and four associate/assistant principals completed the demographic survey (Appendix E) and participated in one-on-one interviews. The participants had a variety of experience and represented schools with varying demographics. The principals were assigned an alphanumeric pseudonym starting with the letter P, and the four associate/assistant principals were assigned the letters AP, followed by a corresponding number. Table 2 displays the demographic results.

Table 2

Demographic Survey Data

Participant Code	Administrative Role	Building Level	Years in Leadership	Gender	Size of School	Setting	Title 1 School	Number of Provisionally Licensed Teachers	Frequency of Support	Length of Time (minutes)
AP1	Assistant Principal	Elementary	10-12	Male	800+	Suburban	Title 1	3-4	One time per month	45
AP2	Assistant Principal	Elementary	7-9	Female	400-800	Suburban	No	1-2	One time per month	30
AP3	Assistant Principal	Elementary	7-9	Female	800+	Suburban	Title 1	10+	Weekly	45
AP4	Assistant Principal	Elementary	4-6	Female	400-800	Suburban	Title 1	5-10	One time per month	45
P1	Principal	Elementary	15+	Female	400-800	Suburban	No	3-4	One time per month	45
P2	Principal	Elementary	15+	Female	400-800	Suburban	Title 1	1-2	One time per month	30
P3	Principal	Elementary	7-9	Female	800+	Suburban	No	1-2	One time per month	45
P4	Principal	Elementary	7-9	Female	<400	Rural	Title 1	5-10	Weekly	45
P5	Principal	Elementary	15+	Female	400-800	Rural	Title 1	5-10	Every other week	45
P6	Principal	Elementary	13-15	Female	800+	Suburban	Title 1	10+	Weekly	+1 hour
P7	Principal	Elementary	4-6	Female	<400	Suburban	Title 1	3-4	Weekly	30
P8	Principal	Elementary	10-12	Female	400-800	Suburban	Title 1	3-4	One time per month	45
P9	Principal	Elementary	7-9	Male	800+	Suburban	Title 1	1-2	Weekly	Less than 30
P10	Principal	Elementary	10-12	Female	800+	Suburban	Title 1	5-10	One time per month	30
P11	Principal	Elementary	7-9	Male	800+	Suburban	Title 1	10+	One time per month	45

The 15 elementary school leaders (N=15) included two leaders employed in rural school divisions, and the remaining 13 school leaders represented suburban school divisions across Virginia. Seven school leaders represented elementary schools with student enrollments of more than 800 students. Twelve participants represented the perspective of working in Title 1 schools. Eight elementary school leaders had between 1-4 provisionally licensed teachers in their schools. Four school leaders had between 5-9 provisionally licensed teachers, and three leaders had over 10 provisionally licensed teachers in their schools.

Data Collection and Gathering Procedures

The data collection included demographic and interview responses. Social and behavioral research certification (Appendix B) was completed through the Collaborative Institutional

Training Initiative (CITI). Approval from the Virginia Polytechnical Institute and State University's Institutional Review Board (IRB) was granted prior to starting this research. Upon receipt of the IRB approval, the study started with purposeful and snowball sampling. The recruitment flyer (Appendix D) was shared via social media and at the Virginia Association of Elementary School Principals conference. The information on the recruitment flyer included the Virginia Tech IRB number, study benefits, eligibility criteria, a QR code link to the demographic survey, and contact information. The demographic survey (Appendix E) was conducted via Virginia Tech's QuestionPro platform. Responses from the demographic survey were reviewed to select a participant sample who fit the study criteria. Potential participants were sent an email (Appendix F) asking potential participants to sign up for a one-on-one interview. The email included an explanation of the study, the consent form (Appendix G), and a scheduling link (Appendix H). A follow-up email was sent to potential participants if a response was not received within 1 week of the initial email (Appendix I). Interviews were scheduled and conducted via the Zoom web-conferencing platform. Interviews were scheduled for up to 30 minutes and automatically transcribed using Zoom's auto-captioning transcription feature. Zoom complies with Virginia Tech's research data protection protocols and is available from multiple locations where the internet is available. A cell phone recording application was also used as a backup for all interviews. Participants were notified that the interview was being recorded and transcribed and were asked to replace their screen name with a specific alphanumeric pseudonym code to ensure anonymity. Each participant was emailed a copy of the interview transcript within 5 days of interview completion for their review and for the opportunity to add to or change any of their responses as member checking, a strategy to ensure internal validity (Lincoln & Guba, 1985; Merriam & Tisdell, 2016). The email stated that if the participant did not respond within

five business days of the email, it would be understood that the participant had approved the interview transcript (Appendix J).

Participants were prompted again, via interview and transcript approval emails, to share any supporting documents such as meeting agendas, collaborative or coaching conversation logs, or support plans for document analysis. This invitation to share documents included a link for leaders to visit to upload any supporting documents. No documents were shared for analysis.

Instrument Design and Validation

Twelve interview questions were developed and IRB approved for this study. The interview protocol (Appendix K) was followed, which focused on the perceptions and experiences regarding the support the participants provided provisionally licensed teachers but allowed for exploratory questioning based on the participant's responses (Merriam & Tisdell, 2016; Miles et al., 2020). The interview questions in the protocol aligned with the study's research questions (Table 3) and were based on the reviewed literature and conceptual framework of this study. The last question allowed participants to assist in snowball sampling by identifying additional participants who fit the study criteria (Patton, 2015). The protocol was validated by aligning with the research objectives and by feedback from doctoral researchers with experience in qualitative research (Merriam & Tisdell, 2016). Dr. Carol A. Mullen, doctoral chair/advisor, provided guidance and feedback on this methodological plan and refined the interview protocol questions.

A colleague's assistance (Appendix L) was sought out to conduct the test interview as recommended by Creswell and Poth (2018). Recording approval and informed consent was granted prior to the test interview. The test interview was beneficial because it helped identify and

resolve issues encountered with the Zoom transcription feature. This experience was used to refine the interview procedures of recording and transcribing using the Zoom auto caption feature.

During the interviews, participants were asked to share their perceptions and experiences about the induction programming and support they provided provisionally licensed teachers using interview questions. This structure allowed for exploration of the answers given by each participant (Merriam & Tisdell, 2016; Miles et al., 2020). Fifteen one-on-one interviews were conducted, recorded, and transcribed via the Zoom online web-conferencing platform. Conducting interviews online was convenient and efficient for participants and researchers due to the flexibility in locations, times, and ease of access for all involved (Merriam & Tisdell, 2016; Miles et al., 2020).

Interview Protocol

The interview approach for this study was semi-structured, providing greater flexibility for exploratory questioning (Merriam & Tisdell, 2016). Table 3 displays the content of the interview protocol, including the alignment of the research questions. A set of questions guided the interview, however, using prompts and follow-up questions provided opportunities for deeper inquiry and learning based on the participant's response. Appendix K lists a sample of possible prompts in the interview protocol.

Table 3

Interview Protocol and Research Question Alignment

<u>Acronyms</u>	Interview Questions	Research Question Alignment
Provisionally Licensed Teachers (PLT)	Research Question (RQ) Sub-question (SQ)	
1.	What strategies do you use or recommend for supporting provisionally licensed teachers in elementary schools?	RQ1/SQ1
2.	How do you differentiate your induction support for your PLT?	SQ1
3.	What are some of the ways your administration dedicates time to supporting PLT?	RQ1
4.	What does the structure of your support meetings with PTLs look like?	RQ1
5.	What are some of the topics of focus you can recommend in supporting your PLT?	RQ1/SQ1

6. What have been your biggest successes in supporting PLT?	RQ1/SQ1
7. What have been your biggest challenges in supporting PLT?	SQ1
8. How does supporting a PLT differ from supporting traditionally licensed new teacher support?	RQ1/SQ1
9. How has your experience in supporting provisional licensed teachers changed over the past 3 years?	RQ1
10. What additional support or resources do you need to help support these teachers?	RQ1
11. Is there anything else you would like to add about supporting PLT?	RQ1/SQ1
12. Do you know any other leaders that might be interested in participating in this study?	Snowball

Confidential and Ethical Treatment of Data

Ethical considerations were considered at every stage of this study (Merriam & Tisdell, 2016). No interviews or participant interaction occurred prior to the approval of the doctoral committee and Virginia Tech's IRB. Consent was obtained from each participant prior to their involvement in this study. The study's topic and purpose were fully disclosed, and participants were reminded about the study's voluntary nature and their ability to withdraw their participation at any time.

Interviews were recorded via Zoom web-conferencing platform. The audio recording was transcribed using the Zoom audio transcription application, and a telephone voice recording function was used as a backup audio recording. Care was taken to ensure participants' anonymity. Therefore, each participant was assigned alphanumeric pseudonyms during web-conferencing calls to keep identities confidential in audio transcripts. The document with the participants' identifying information was stored in a separate, secure location and will be destroyed 5 years after the completion of the study. Throughout this study, all associated data and analyses were kept confidential and stored on a password-protected electronic drive only accessible to the researcher and principal investigator (advisor). At the end of the 5-year timeframe, all data associated with the study will be deleted.

Data Analysis

Data collection and analysis are effectively repeated processes that should be conducted simultaneously and on-going as data is collected (Merriam & Tisdell, 2016). Data analysis started by reviewing and organizing the data from a demographic survey collected via Virginia Tech's QuestionPro platform (Table 2). The survey was designed to collect demographic data and was used to select qualified participants based on the criteria set for this study. Additionally, data from the demographic survey provided some context about the school demographics of each participant. Data from the demographic survey, using participant pseudonyms, was organized into a spreadsheet based on responses to the survey questions.

The next step was to organize the collection of recordings, transcripts, and notes taken from individual interviews. Interview responses were placed into a two-column note-taking document by question. Data coding began as soon as each interview had been transcribed (Creswell & Poth, 2018; Merriam & Tisdell, 2016). The data underwent two coding cycles, starting with the initial deductive codes derived from the literature and the research questions (Miles et al., 2020). The following list of initial deductive codes came from the literature review and research questions: peer observation, mentor, classroom management, coaching, instructional support, behavior support, professional development, accessibility, and time management. Deductive codes were assigned to the data during the first coding round (Miles et al., 2020).

At this point in the data analysis process, two doctoral researchers reviewed the first interview transcript and provided feedback. These trusted individuals were chosen because of their recent experience with qualitative research, with confidence that they would provide honest and accurate feedback. These colleagues provided input about codes used in the initial round of coding, discrepancies were discussed, and a consensus was determined as a part of the inter-

coder agreement process in the data analysis process (Miles et al., 2020). One doctoral researcher assisted in discerning the coding process. Prior to this discussion, the deductive codes were being used too literally. Through conversation and examples, the peer coder helped reveal how deductive codes, such as coaching, could also be applied to data related to instructional support. This was a beneficial exercise at the beginning of the data analysis process. The inter-coder agreement was reached, and the remaining data was initially coded using deductive codes. A second coding cycle was employed to categorize the codes and identify any patterns and themes based on the coding and condensing process (Creswell & Poth, 2018; Miles et al., 2020).

Summary

This chapter discussed the research design and included details of this study's methodology, data collection, and data analysis. A basic qualitative study was employed to understand the induction programming and support structures elementary school leaders provide to provisionally licensed teachers. The research questions, instrument validity, and interview protocol were discussed. Two sources of data were used: a demographic survey and individual interviews. Ethics and data management were highlighted, and data analysis techniques were described. Chapter 4 summarizes the 10 findings and data points of the study.

Chapter 4: Data Analysis and Findings

Introduction

The purpose of this qualitative study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they provide provisionally licensed teachers. The research question guiding this study was: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers? The sub-question was: How do elementary school leaders differentiate induction support for provisionally licensed teachers? Study participants were recruited using purposeful and snowball sampling. The study included 15 elementary school leaders, 11 principals and 4 associate/assistant principals. Participants presented a variety of personal perspectives based on their experiences in supporting provisionally licensed teachers. The school leaders' experience ranged between 4-15 or more years, and they supported between 3-10 or more provisionally licensed teachers.

Each elementary school leader participated in a one-on-one virtual interview via Zoom. The Zoom auto-captioning feature was used to create transcripts of each interview. Member checks were completed, and only one participant wished to review their interview record to change words that the Zoom transcription feature had missed and make the response more concise.

Findings

All participants were asked the same 12 questions from the interview protocol (Table 3). One interview question (number 11) was intended to capture any additional topics or perceptions the participant wanted to expand upon that may not have been covered by the previous interview

questions. Responses to this question were analyzed and included in the findings. The final interview question (number 12) was not analyzed as it was related to snowball sampling for participant recruitment. Participant responses were analyzed for common themes regarding their perceptions and experiences working with provisionally licensed teachers. Table 4 displays the 10 findings that emerged from the interview questions. A finding was deemed major if 10 or more participants' responses contained similar themes. The themes included the perceived importance of mentoring support (15 school leaders), the benefits of coaching (15 school leaders), peer observations (10 school leaders), open communication (11 school leaders), resource management (11 school leaders), managing workload and support (10 school leaders), career development (12 school leaders), school culture and community (12 school leaders), increased division level support for provisionally licensed teachers (12 school leaders), and targeted professional development (15 school leaders).

This chapter presents the findings with aligned responses from interviewees. Participant quotes may have been edited for readability to remove conversation spacers (“you know,” “um,” “like”), which do not impact the context or meaning of the interview response. The findings were organized by first outlining key induction support structures for provisionally licensed teachers, followed by the responsibilities of school leaders, and concluding with the recommended support for provisionally licensed teachers.

Table 4

Elementary School Leaders' Perceptions of Induction Support Structures for PLTs

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Mentoring	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Coaching	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peer Observation	X		X	X	X	X	X	X			X	X		X	
Communication	X		X	X	X	X	X	X		X	X		X		X
Resource Management	X	X	X	X	X	X	X	X		X		X		X	
Managing Workload and Support	X		X	X	X	X		X	X		X	X		X	
School Culture and Community	X		X	X	X	X	X	X	X	X				X	

Career Development	X	X	X		X	X	X	X	X	X	X	X			X	
Increased Division Level Support			X	X	X	X	X	X	X	X	X	X			X	X
Targeted Professional Development	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Finding 1

Elementary school leaders perceived mentoring as an essential support structure in supporting the professional growth of provisionally licensed teachers.

Analysis to Support Finding 1. The assignment of a mentor as a support structure for provisionally licensed teachers was utilized by all 15 elementary school leaders in this study (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, AP1, AP2, AP3, AP4). Mentoring is a foundational induction support structure that is crucial to a new teacher’s success and growth (Bland et al., 2014; Frels et al., 2013; Hallam et al., 2012; Kang, 2011; Kram, 1983; Mullen et al., 2022; Rose & Sughrue, 2021; Schatz-Oppenheimer, 2017; Whalen et al., 2019; Wilhelm et al., 2021).

Nine elementary school leaders discussed mentor selection and the need to carefully consider various factors when pairing mentors with mentees to ensure a good relationship (P1, P2, P3, P4, P5, P6, P7, P11, AP1). Eight elementary school leaders assigned mentors based on the grade level or department of the provisionally licensed teacher (P2, P3, P4, P5, P6, P7, P11, AP1). One principal (P5) explained, “Assigning mentors that are in proximity, in a similar content area or grade level, provide that mentor with the expertise to be able to quickly point out areas to support [provisionally licensed teachers] in.” In a case when a mentor could not be found on the same grade level, one elementary school leader (P6), with over 10 provisionally licensed teachers in the school, mentioned, “We get a reading or math teacher to agree to mentor them.” One school principal (P2) described purposefully placing provisionally licensed teachers with strong teachers as mentors by stating, “We try to make sure they get first dibs on the most experienced teacher to be their mentor.” However, one participant (P1) explained that assigning

a non-grade level mentor provided the mentee with a different perspective and safe space for questions or “while having some hard conversations.”

Ten elementary school leaders described using a structured mentoring approach to support provisionally licensed teachers, such as weekly or monthly set meetings with mentors to provide consistent support and regular check-ins (P1, P2, P3, P4, P5, P6, P7, P8, P10, AP1). One principal (P7) stated, “Our provisionally licensed teachers also meet bi-weekly with their mentor.” Another school leader (P10) noted, “We have weekly provisionally licensed teacher meetings, and we scaffold those based on experience, especially at the beginning of the year.” One principal (P1) compared by saying, “We try to scaffold that just like you would do teaching a student.” Additionally, a principal (P6) shared:

We carve out time to focus on something new that a provisionally licensed teacher might find helpful in their classroom, like classroom management structures, working with challenging student behaviors, how to work best with parents that might present a little challenging, how to engage students or more things of that nature.

Another principal (P8) stated, “We’ll have meetings with them and other licensed teachers so they can kind of learn from each other. We’ll have meetings with them and their mentor so they can have that structure of support.”

Eight elementary school leaders tailored mentoring support based on the individual needs of the provisionally licensed teacher rather than applying a one-size-fits-all approach (P2, P4, P7, P9, P10, AP2, AP3, AP4). One school principal (P7) explained, “I meet with them and their mentor. I get to know them, determine their specific needs, and how comfortable they are with the grade level they are teaching. Then, I figure out how to support them in their teaching experience.” Three school leaders (P2, AP2, AP3) noted the benefits of “honing in” on the type

of support their provisionally licensed teachers needed and addressing their needs. One assistant principal (AP3) emphasized the role observations play in supporting provisionally licensed teachers to “figure out and identify per teacher what their need would be.” Another school leader (P10) stated that, at his school, support for provisionally licensed teachers was “done differently, based on their experience and their knowledge.”

Finding 1 Summary. Elementary school leaders perceived mentoring as a crucial structure for supporting the professional development of provisionally licensed teachers. The responses to interview question 1: *What strategies do you use or recommend for supporting provisionally licensed teachers in elementary schools?* and interview question 10: *Is there anything else you would like to add about supporting PLT?* were used to develop Finding 1. All 15 elementary school leaders who participated in this study assigned mentors to support the provisionally licensed teachers in their schools. Common perceptions among elementary school leaders included careful selection of mentors with provisionally licensed teachers to ensure effective partnerships, using a structured mentoring approach when supporting provisionally licensed teachers, and individualizing support based on the needs of the provisionally licensed teachers. Table 5 displays an overview of the perceptions of mentoring by participants that supports this finding.

Table 5

Elementary School Leaders’ Perceptions of Mentoring for Provisionally Licensed Teachers

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Mentor selection	X	X	X	X	X	X	X				X	X			
Structured approach	X	X	X	X	X	X	X	X		X		X			
Individualized Support		X		X			X		X	X			X	X	X

Finding 2

Elementary school leaders perceived coaching as valuable in supporting provisionally licensed teachers.

Analysis to Support Finding 2. All 15 elementary school leaders in this study reported providing coaching support through observations and feedback for provisionally licensed teachers (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, AP1, AP2, AP3, AP4). According to Mullen et al. (2021), coaching should be a mutually beneficial experience for both coaches and participants. Coaching novice teachers may require collaboration with additional support staff to reduce the coaches' workload as the new teachers acclimate to the profession and improve their teaching skills (Cardichon et al., 2020; Mullen et al., 2021).

Eleven elementary school leaders discussed ongoing training and coaching cycles to support provisionally licensed teachers (P1, P2, P3, P4, P5, P6, P10, P11, AP1, AP3, AP4). These school leaders mentioned that provisionally licensed teachers need this level of training and professional development through observations and consistent and constructive feedback. One school principal (P6) stated, "We've done frequent walkthroughs that provide feedback. The goal is to give immediate feedback within 5 school days. So that we can be immediate about celebrating and looking for opportunities for growth." Another principal (P4) expressed the need to follow up after coaching sessions: "Making sure that you are circling back to them and observing them again to see if any of the strategies that were put in place for them helpful."

Five leaders noted using observations to inform support strategies for provisionally licensed teachers (P2, P3, P6, AP1, AP3). A principal (P4) described how teachers record themselves and then sit down and do some "side by side coaching" to discuss what they have seen. Another principal (P2) detailed how "they talk about look for's and what the teacher feels like they could implement right away, and what they think they could do or would struggle with"

during coaching feedback sessions. Three leaders discussed observations to identify support needs rather than punitive actions (P4, AP1, AP3). An assistant principal (AP4) noted that the best way to support provisionally licensed teachers is for feedback to be “immediate, constructive, and supportive, focusing on growth and development, rather than punitive measures.” A principal (P4) stated, “None of this is punitive... our goal in education is to coach you up and to keep you. [People] to go in and observe to let them know that I am just here to see what you need.” Another assistant principal (AP1) explained, “We all went into the classroom just to provide that extra set of eyes, not from a punitive standpoint, but from an observational standpoint.”

Ten leaders discussed utilizing the support of a collaborative team leveraging the strengths and expertise of the various school personnel such as literacy specialists, math specialists, instructional designers, instructional coaches, and other qualified veteran teachers (P1, P3, P4, P6, P7, P9, P10, AP1, AP3, AP4). One assistant principal (AP1) described incorporating feedback from informal observations from support staff, who interact directly with teachers, to inform and adjust support strategies: “We had a collective group of individuals to try to help these teachers move forward in the right direction.” Seven elementary school leaders used instructional specialists for targeted instructional support and strategies for provisionally licensed teachers (P1, P3, P4, P6, P9, P10, AP1). One principal (P6) explained, “We provide a lot of coaching as a strategy... with literacy and math specialists and our instructional designer.” Their support allows for open discussions about strengths, weaknesses, and learning moments, and coupled with feedback from peers, contributes to improved teaching practices and increased confidence. Three elementary school leaders noted the value of having neutral, unbiased coaches who can provide objective support for provisionally licensed teachers (P9, P10, AP1).

Eight elementary school leaders acknowledged their experiences with the variability of provisionally licensed teachers' responses towards feedback (P1, P4, P6, P7, P8, P11, AP1, AP2). Six leaders spoke about the importance of teachers being receptive to feedback for successful support and the impact of a teacher's receptivity to feedback complicating performance improvement efforts (P4, P7, P8, P11, AP1, AP2). One elementary school leader (P7) noted a success they experienced when "staff members were open to feedback because they had to learn the curriculum. They had a lot to learn quickly, but they wanted to be provisionally licensed, and they did." An assistant principal (AP2) stated, "Some people are more open to feedback. I think sometimes they know if it's not going well." Another elementary school principal (P4) expressed:

Some adults feel like their skill set goes far beyond what it actually is, so it's hard to have that conversation with an adult when they feel like they are being more successful in a classroom than they truly are.

Three other school leaders addressed the challenges they face when teachers are not receptive to feedback or are unwilling to take the suggestions of the specialists there to support their professional growth (P8, P11, AP1). One principal (P11) spoke about addressing the challenge of new teachers who believe they are ready and know how to handle classroom situations but may not be open to guidance: "Some of the challenges, I would say, is that some feel like they kind of know it all. Being resistant to change."

Five elementary school leaders discussed how they scaffold the support for their provisionally licensed teachers (P1, P6, P8, P10, AP3). One principal (P6) promoted team collaboration and access to shared lesson plans and assessment models: "They are never left isolated or working in a silo ... teams lesson plan together, and they talk through all

assessments.” This encourages team collaboration and provides novice teachers with access to exemplary lesson plans and assessment models. Three other elementary school leaders mentioned how they gradually reduce support as teachers grow competency (P1, P10, AP3). One school leader (P1) stated, “We felt like if we held their hands more upfront, then when we scaffold off more, they’ll have a better foundation.” Another principal (P10) explained, “We have PLT meetings, and we scaffold those based on experience, especially at the beginning of the year.” An assistant principal (AP3) shared her experience as a provisionally licensed teacher and continuous support in the early years of her career. She believed her early support was beneficial for instilling a strong foundation in important classroom and instructional practices.

Summary of Finding 2. Elementary school leaders perceived coaching as valuable support for provisionally licensed teachers. The responses to interview question 1: *What strategies do you use or recommend for supporting provisionally licensed teachers in elementary schools?*, interview question 4: *What does the structure of your support meetings with PTLs look like?*, interview question 7: *What have been your biggest challenges in supporting PLT?* and additional context in the response to interview question 11: *Is there anything else you would like to add about supporting PLT?* was used to develop finding 2. All 15 elementary school leaders reported providing coaching support through observations and feedback for provisionally licensed teachers. Other common coaching practices mentioned include ongoing coaching cycles, utilizing the collaborative support of instructional specialists, considerations regarding variability of teachers’ responses to feedback, and a scaffolded approach to coaching support as teachers increase competency. Table 6 contains an overview of the perceptions of coaching by participants that supports this finding.

Table 6*Elementary School Leaders' Perceptions of Coaching for Provisionally Licensed Teachers*

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Ongoing Coaching Cycles	X	X	X	X	X	X				X	X	X		X	X
Collaborative support	X		X	X		X	X		X	X		X		X	X
Teacher Response to Feedback	X			X		X	X	X			X	X	X		
Scaffolded Support	X					X		X		X				X	

Finding 3

Elementary school leaders perceived peer observations as beneficial to improve teaching practices and build confidence in provisionally licensed teachers.

Analysis to Support Finding 3. Ten elementary school leaders provided opportunities for provisionally licensed teachers to conduct peer observations as an induction support strategy (P1, P3, P4, P5, P6, P7, P8, P11, AP1, AP3). High-quality induction supports, such as peer observations, have been shown to enhance beginning teachers' efficacy (Bland et al., 2023; Wilhelm et al., 2021). Peer observations are formative and guide new teachers' practice as they continue developing their skills (NTC, 2018).

Ten elementary school leaders encouraged provisionally licensed teachers to observe seasoned teachers to learn about content delivery and classroom management (P1, P3, P4, P5, P6, P7, P8, P11, AP1, AP3). Seven school leaders perceived observing peers and receiving feedback as a way of improving teaching practices and building confidence (P1, P4, P5, P6, P11, AP1, AP3). One principal (P11) stated, "Teachers learn more effectively from observing and interacting with experienced colleagues." Another school leader (P6) said, "I think it's important for them to have lots of opportunities, as many opportunities as possible, for peer observation. Allowing them to see licensed teachers, those strong teachers in the building who have been successful." When asked about their greatest success in supporting provisionally licensed teachers, one assistant principal (AP3) stated:

I would say our peer observations and allowing them to get into classrooms. Because you can talk to them and teach them all of these strategies, but until they see it put into practice, and who is better at being able to do that than the teachers right here in your building. They are the masters of their profession. So, I think that has probably been the biggest success is having and allowing them the opportunity to do those peer observations.

Five elementary school leaders addressed logistical challenges such as time constraints and coverage to facilitate peer observations for provisionally licensed teachers (P3, P6, P7, AP1, AP3). One principal (P6) stated that additional resources such as allotted substitute days would be beneficial to address the challenges in conducting peer observations. Two leaders discussed the importance of recognizing and addressing the practical challenges faced by provisionally licensed teachers, such as lack of practical classroom experience, which were perceived as barriers to peer observations (P7, AP1). One principal (P7) mentioned, “Some of our provisionally licensed teachers are not skilled in identifying those important instructional strategies they are seeing [through peer observations].”

Three other school leaders discussed cross-school observations by allowing provisionally licensed teachers to conduct observations across different schools for broader learning (P1, P7, AP1). A principal (P7) who had already implemented this practice stated, “We’ve had some of our Head Start teachers go to other schools to see how another teacher and another school is doing that.” Another assistant principal (AP1) remarked, “This is important so they can get feedback from other schools and individuals.”

Summary of Finding 3. Elementary school leaders perceived peer observations as a beneficial way to improve teaching practices and build confidence in provisionally licensed

teachers. The responses to interview question 1: *What strategies do you use or recommend for supporting provisionally licensed teachers in elementary schools?*, interview question 3: *What are some of the ways that your administration dedicates time to supporting provisionally licensed teachers?*, interview question 7: *What have been your biggest challenges in supporting PLT?*, interview question 8: *How does supporting PLT differ from supporting traditionally licensed new teacher support?*, interview question 10: *What additional support or resources do you need to help support these teachers?*, and interview question # 11: *Is there anything you would like to add about supporting provisionally licensed teachers?* were used to develop finding 3. Ten elementary school leaders reported encouraging provisionally licensed teachers to conduct peer observations. Five school leaders discussed logistical challenges in supporting peer observations. Three school leaders shared their experiences with cross-school observations for provisionally licensed teachers. Table 7 contains an overview of participants' perceptions of peer observations that supports this finding.

Table 7

Elementary School Leaders' Perceptions of Peer Observations for Provisionally Licensed Teachers

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Encouraged Peer Observations	X		X	X	X	X	X	X			X	X		X	
Logistical Challenges			X			X	X					X		X	
Cross-School Observations	X						X					X			

Finding 4

Elementary school leaders expressed the importance of communication with provisionally licensed teachers.

Analysis to Support Finding 4. Successful teacher support is heavily dependent on open lines of communication, which ensure that teachers feel heard and supported through regular

interaction with their school leaders. Eleven elementary school leaders highlighted the strategy of regular communication and support throughout the year, including separate meetings, texts, emails, and in-person visits to check on progress and offer assistance (P1, P3, P4, P5, P6, P7, P8, P10, P11, AP2, AP4). According to Carver-Thomas and Darling-Hammond (2017), when teachers feel that their administration is communicative and supportive, they are twice as likely to stay at their school and in the profession. The ability to communicate and create interpersonal relationships is an integral part of support and mentoring for new teachers (Schatz-Oppenheimer, 2017). Personal communication and connections matter and are encouraged (Mullen & Fallen, 2022).

One principal (P3) stated, “Communication is key. I think it's so important to just be available and to be supportive.” Another principal (P10) emphasized the importance of regular, proactive support through communication and engagement with teachers. He adopts the strategy of “regular communication and support throughout the year, including separate meetings, texts, emails, and in-person visits to check on progress and offer assistance.” One school principal (P4) shared, “Your provisionally licensed teachers are inexperienced teachers. It’s really important to make sure that you're checking in with them frequently.”

Six school leaders mentioned the significance of personalized interactions and check-ins in building personal relationships with new teachers, leading to more open and effective feedback (P4, P5, P7, P8, P11, AP4). One school leader (P5) communicated with her provisionally licensed teachers by having a “face-to-face morning networking opportunity and daily morning check-ins on how people are doing”. Another principal (P7) stated, “I think they need a little more facetime with administrators checking in. So those verbal check-ins, classroom walkthroughs, formal observations as well, but also informal walkthroughs. Just being present in

the classroom.” One principal (P8) described the process for her provisionally licensed teachers to communicate with her: “I make sure that they have access to the check-in form. So, if they need me for certain things that they know they can check in with me.”

Five elementary school leaders emphasized the importance of relationship building as the basis for supporting provisionally licensed teachers (P1, P5, P6, P7, AP4). These relationships of trust are built through ongoing communication and engagement between the provisionally licensed teachers and those who support them. One assistant principal (AP4) stated, “If you don’t have those constant check-ins, you’ll miss those little opportunities to support them.” Another school principal (P5) explained, “When it comes to things they aren’t too sure about, if they know they have the relationship with their administrator, then they aren’t afraid to ask or take that risk.” Trust and strong relationships are foundational for effective teacher support, fostering a safe environment that encourages professional risk-taking and growth.

Four elementary school leaders described open communication with their provisionally licensed teachers (P5, P6, P11, AP2). One principal (P11) encouraged maintaining “transparent, honest dialogues about needs and challenges in the classroom.” Another school principal (P6) stated:

I want to highlight the communication. We do have a structure of weekly communication, and we’ve got full transparency to lesson plans and full transparency to data and full transparency to communication on a weekly basis with a calendar, with suggestions posted in our weekly communication, or questions, concerns, things like that that they can bring up.

Additionally, two elementary school leaders shared about their open-door policy (P6, AP2). This policy is put into practice as an “encouragement for teachers to ask questions and seek help without hesitation,” according to one assistant principal (AP2).

Summary of Finding 4. Elementary school leaders expressed the importance of open communication with provisionally licensed teachers. The finding was developed using responses from interview question 1: *What strategies do you use or recommend for supporting the licensed teachers in elementary schools?*, interview question 3: *What are some of the ways that your administration dedicates time to supporting provisionally licensed teachers?*, interview question 4: *What does the structure of your meetings with PTL look like?*, and interview question 7: *What have been your biggest challenges in supporting PLT?* Six elementary school leaders discussed the significance of personalized communication as support for provisionally licensed teachers. Five elementary school leaders emphasized the importance of relationship building as the basis for supporting provisionally licensed teachers. Four school leaders mentioned open communication to encourage honest dialogue about needs and challenges in the classroom. Table 8 contains an overview of the perceptions of communication by participants that supports this finding.

Table 8

Elementary School Leaders' Perceptions of Communication

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Personalized Communication				X	X		X	X			X				X
Relationship Building	X				X	X	X								X
Open Communication					X	X					X		X		

Finding 5

Elementary school leaders reported the importance of resource management when working with provisionally licensed teachers.

Analysis to Support Finding 5. Eleven elementary school leaders discussed the importance of resource management for school leaders in supporting provisionally licensed teachers (P1, P2, P3, P4, P5, P6, P7, P8, P10, AP1, AP3). Administrative strategies play a critical role in shaping the support structure for teachers, from effective decision-making in staffing to allocating funding for support (Frels et al., 2013; Wilhelm et al., 2021). Principals are responsible for ensuring equitable access to resources for all new teachers (Mullen & Fallen, 2022).

Eight school leaders mentioned efficient time allocation for meetings and support (P1, P2, P3, P4, P5, P6, P8, AP1). One school principal (P3) suggested having a purposeful use of meeting time with prepared agendas or slide decks, focusing on being available for what matters most and simplifying processes. Another principal (P5) mentioned that meetings are scheduled within specific time limits to respect participants' time: "Meetings are always time-bound because you don't want to waste people's time." An associate principal (AP1) explained how he makes sure to streamline meetings using pre-set agendas with specific time allotments to be purposeful and not overly time-consuming.

Ten school leaders described their role allocating funding to support provisionally licensed teachers (P1, P4, P5, P6, P7, P8, P9, P10, AP1, AP3). A school principal (P6) noted, "Effective management of resources and time is crucial to provide sustained support for teachers without overwhelming them or the system." Another school principal (P1) detailed how funds are allocated to these teachers to support instructional materials and professional development: "I let them know that they have \$500 to spend on their classroom. So that could be chart tablets, charts for organizing groups, or anything they need for instruction." Resource allocation also includes instructional support personnel such as literacy and math specialists. Three school

leaders described how they allocated school funds to provide behavior and instructional support specialists (P9, P10, AP1). One principal (P9) worked strategically with human resources and the Title 1 office to allot funding and add an instructional coach position to support provisionally licensed teachers: “The instructional coach is going to help coach new teachers because my numbers are high, and teachers are struggling. I need somebody that's dedicated to [coaching] instead of just being a touch point such as an assistant principal.”

Four principals discussed the importance of being flexible and responsive in managing resources to support provisionally licensed teachers (P1, P3, P4, P6). In their experience, adapting strategies was essential based on ongoing feedback and emerging needs. Two principals mentioned the importance of gathering teacher input to shape effective support systems (P3, P6). One principal (P6) stated, “We gather feedback on what [teachers] might want some support in... and embed those in our future sessions.” The other school leader (P3) referenced being flexible and giving grace. She detailed that working with provisionally licensed teachers may require school leaders to “adopt more of a coaching mindset and give a little bit more grace, especially at the beginning.” Another principal (P4) acknowledged the feedback she received that indicated the provisionally licensed teachers felt they had a lack of time during their planning period and came up with a solution to offer more time: “We can double block [planning periods] on certain days to provide them with 90 min. So, I would just like to provide them with extra time that can be covered in house.”

Summary of Finding 5. Elementary school leaders reported the importance of resource management when working with provisionally licensed teachers. The finding was developed using responses from interview question 1: *What strategies do you use or recommend for supporting the provisionally license teachers in elementary schools?*, interview question 2: *How*

do you differentiate your induction support for your PLT?, and interview question 4: *What does the structure of your meetings with PTL look like?* were used to develop finding 5. Eight school leaders discussed time management. Ten participants described the school leaders' role in resource allocation to support provisionally licensed teachers. Four school leaders expressed the importance of flexibility and adaptability of resources when working with provisionally licensed teachers. Table 9 contains an overview of participants' perceptions of resource management that supports this finding.

Table 9

Elementary School Leaders' Perceptions of Resource Management in Supporting Provisionally Licensed Teachers

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Time Management	X	X	X	X	X	X		X				X			
Funding Allocation	X			X	X	X	X	X	X	X		X		X	
Flexibility	X		X	X		X									

Finding 6

Elementary school leaders acknowledged the challenge of managing the administrative workload while providing quality support for provisionally licensed teachers.

Analysis to Support Finding 6. Ten elementary school leaders mentioned balancing the administrative workload in supporting provisionally licensed teachers (P1, P3, P4, P5, P6, P8, P9, P11, AP1, AP3). These leaders expressed the delicate balance between offering the necessary support and avoiding overwhelming new teachers or burning out those individuals tasked with additional responsibilities. Wilhelm et al. (2021) suggested that managing the organization and identifying and allocating the right resources should be the primary goals of school leaders, not immediately assisting with instruction support. School leaders reported more demanding

workloads and an increase in the need for supporting novice teachers due to the teacher shortage (Bland et al., 2023; JLARC, 2022).

Seven school leaders referenced the insufficient time to support provisionally licensed teachers (P1, P3, P4, P5, P8, P9, AP1). They noted that school leaders' schedules do not allow time to sufficiently address the needs of provisionally licensed teachers. It should be noted that this perception was mentioned by school leaders who had more than four provisionally licensed teachers. One principal (P3) shared, "The number one challenge is time; having enough time to meet their needs. That's the focus of this year ... focus on making time for what matters most and simplifying processes." Another principal (P4) referenced the amount of time supporting a grade level with only one veteran teacher: "I will be spending a lot of time in their planning meetings and PLC meetings, just to make sure that we are able to support them anyway necessary; because it's hard for one teacher to support three new teachers."

Nine elementary school leaders discussed the challenge of effectively managing and supporting the workload of supporting provisionally licensed teachers (P3, P4, P5, P6, P8, P9, P11, AP1, AP3). One principal (P6) expressed the extent of their workload by stating, "At my school, we have so many new and provisionally licensed teachers. I don't have that full count, it's probably somewhere around 15 to 17 teachers out of our 45 K-5 teachers." She explained how her school manages the workload of supporting so many new and provisionally licensed teachers at her school: "We provide a lot of coaching as a strategy... with literacy math specialists and our instructional designer." An assistant principal (AP1) noted the high workloads school leaders face due to the extensive number of provisionally licensed teachers and insufficient resources:

With a staff as large as we had over the last few years, we had anywhere from 19 to 25...

it would have been great to designate 1-2 people that their sole job was to work

with the provisionally licensed teachers.

One school leader (P9) mentioned the need to delegate some responsibilities to ensure that he can focus on overarching goals. He describes distributing the workload of the other administrative tasks such as parent phone calls and discipline to “be able to be out there more, and not be in the weeds of the other stuff. To be able to build these relationships [with provisionally licensed teachers] and keep them.”

Eight elementary school leaders detailed an increased responsibility for training provisionally licensed teachers (P1, P3, P4, P6, P8, P9, P11, AP1). These school leaders are faced with the demand for continuous coaching and support for provisionally licensed teachers, especially those struggling with classroom management and instructional delivery. An assistant principal (AP1) explained:

It was a lot of time coaching and supporting them. We had some that we were willing to take what our support staff suggested and run with it. With others, it was almost like constantly going in to observe and support.

Another school principal (P1) discussed how her school shifted the responsibility for training off the grade-level team leaders, as they were already helping on a larger scale with team planning. The training is now being conducted by the school administration, instructional designer, and literacy and math instructional specialists. Another principal (P8) noted, “The diverse responsibilities of being an administrator dilute my ability to provide targeted coaching and support to the extent that I care to for my teachers.”

Summary of Finding 6. Elementary school leaders acknowledged the challenge of managing the administrative workload while providing quality support for provisionally licensed teachers. The finding was developed using responses from interview question 3: *What are some*

of the ways that your administration dedicates time to supporting provisionally licensed teachers?, interview question 7: *What have been your biggest challenges in supporting PLT?*, and interview question 10: *What additional support or resources do you need to help support these teachers?* were used to develop finding 6. Seven school leaders discussed time for support. Eight elementary school leaders mentioned the increased workload of school leaders in supporting provisionally licensed teachers. Eight participants detailed the increased responsibility for training for provisionally licensed teachers. Table 10 contains an overview of the perceptions of balancing the workload in supporting provisionally licensed teachers by participants that supports this finding.

Table 10

Elementary School Leaders' Perceptions of Balancing the Workload in Supporting Provisionally Licensed Teachers

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Time for Support	X		X	X	X			X	X			X			
Workload of Supporting			X	X	X	X		X	X		X	X		X	
Increased Responsibility for Training	X		X	X		X		X	X		X	X			

Finding 7

Elementary school leaders acknowledged the importance of the school culture and community in supporting provisionally licensed teachers.

Analysis to Support Finding 7. Twelve elementary school leaders discussed the importance of a supportive school culture on provisionally licensed teachers' success (P1, P3, P4, P5, P6, P7, P8, P9, P10, AP1, AP3). Leaders should continuously seek ways to incorporate new teachers into the school's culture and community (Hallam et al., 2012). However, acclimating teachers to the school culture and community is not left entirely to the leadership;

veteran teachers and support staff also help these teachers integrate into the school community (Mullen & Fallen, 2022).

Ten school leaders described the collaborative culture in their schools that helps support their provisionally licensed teachers (P1, P3, P4, P5, P6, P7, P8, P9, P10, AP3). One principal (P6) expressed, “We do a lot of collaboration. So, these teachers are never left isolated or working in a silo.” She details how her school teams provide a strong structure of support for their provisionally licensed teachers through collaboration. Another principal (P4) mentioned, “Collaboration with a specific grade level, particularly where there is a mix of veteran and new teachers, to enhance support and planning for provisionally licensed teachers.” Another school leader (P9) emphasized hiring “good people” with a positive attitude and work ethic to ensure a supportive and collaborative work environment.

Seven leaders detailed how they support their provisionally licensed teachers with family engagement (P1, P5, P6, P7, P8, P9, AP1). One elementary school principal (P1) stated, “Family engagement and relationships with parents are the most important things for provisionally licensed teachers to learn. That should be their focus at the beginning of the year.” She also explained that her teachers call their students and parents to initiate a positive partnership, which is important to family engagement. Another principal (P8) described how she coaches her provisionally licensed teachers to effectively communicate with families: “Sometimes it can be difficult to communicate, what to communicate, how to communicate, and when to communicate. We discuss that, then I make sure they know about all the supports in the building.”

Eight leaders mentioned the importance of building a strong support community for their provisionally licensed teachers (P3, P4, P5, P6, P7, P9, P10, AP3). According to one school

principal (P9), building a family-like support system within the school can help with retaining provisionally licensed teachers. Another principal (P3) shared that her biggest success in supporting provisionally licensed teachers was ensuring new teachers feel included as part of the staff and school community:

It starts with building that relationship by welcoming them in and being part of our school family. That starts with that very first interaction with that contact to set up that interview and just letting them know the support they will receive from you, as the administrator, and your school community.

Summary of Finding 7. Elementary school leaders acknowledged the importance of the school culture and community in supporting provisionally licensed teachers. The finding was largely developed using responses from interview question 6: *What have been your biggest successes in supporting PLT?*, and interview question 1: *What strategies do you use or recommend for supporting the provisionally licensed teachers in elementary schools?* were used to develop finding 7. Ten school leaders discussed how to create a collaborative culture. Seven participants described how they support provisionally licensed teachers in family engagement. Eight school leaders expressed the importance of building a strong support system within the school for provisionally licensed teachers. Table 11 contains an overview of the perceptions of school culture and community by participants that support this finding.

Table 11

Elementary School Leaders' Perceptions of School Culture and Community in Supporting Provisionally Licensed Teachers

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Collaborative Culture	X		X	X	X	X	X	X	X	X					X
Family Engagement	X				X	X	X	X	X			X			
Supportive Community			X	X	X	X	X		X	X					X

Finding 8

Elementary school leaders reported success in the career development of individuals who become provisionally licensed teachers.

Analysis to Support Finding 8. Twelve elementary school leaders reported success in “growing their own” and developing the careers of individuals who previously worked in their schools and chose to become provisionally licensed teachers (P1, P2, P3, P5, P6, P7, P8, P9, P10, P11, AP1, AP4). These leaders supported and encouraged the career development of non-certified staff working in their schools to become provisionally licensed teachers. Effective “grow your own” programs that recruit and train teachers from within local communities have been shown to increase diversity and teacher retention (Bland et al., 2023, 51).

One principal (P1) shared, “A lot of the people that started off at [my school] as instructional support are now teaching here in [this school division]. So, one of the biggest things I try to do is help people grow their careers.” An assistant principal (AP4) said, “We have three teachers this year in their third year of the iteach program or being in the classroom. This beneficial program allowed these teachers the resources they needed for teacher development.” One principal (P6) shared parents’ perceptions of their student’s classroom teacher transitioning from non-certified to provisionally licensed: “I know our parents are just thankful to hear that they’re provisionally licensed now and working towards full licensure.”

Nine school leaders referenced involvement with online certification programs, the iteach program, and local university teacher residency programs (P1, P2, P3, P5, P6, P7, P9, P10, AP4). One school principal (P1) talked about a substitute who transitioned to become a provisionally licensed teacher:

We had one this year that was a sub the year before. She loved it so much that she wanted to get into the teacher program. So, we worked with human resources, and we got her into the iteach program. By April, she had her provisional teaching license.

Another school leader (P5) stated, “Two individuals that were with us prior to the pandemic are now full-fledged into the iteach program becoming licensed teachers ... and are still passionate about becoming a teacher. That's a big success.” Three school leaders described how these programs reduce time and financial barriers for people seeking to become teachers to enter their careers (P9, P10, AP4). One assistant principal (AP4) stated, “I do appreciate the iteach program that is out there, where staff are able to get on-the-job trainings on what they need to be doing in the classroom to be the most effective teacher that they can be.”

Summary of Finding 8. Elementary school leaders reported success in the career development of individuals choosing to become provisionally licensed teachers. The finding was largely developed using responses from interview question 7: *What have been your biggest challenges in supporting PLT?*, interview question 10: *What additional support or resources do you need to help support these teachers?*, and interview question 11: *Is there anything you would like to add about supporting provisionally licensed teachers?* were used to develop finding 8. Twelve school leaders discussed promotion of non-certified staff members from within their schools. Nine participants reported on the benefits of the partnerships with programs like GCU, iteach, and local university teacher residency programs. Table 12 contains an overview of the perceptions of success in career development for potential provisionally licensed teachers by participants that supports this finding.

Table 12*Elementary School Leaders' Success in Career Development for Potential Provisionally**Licensed Teachers*

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4	
Promotion from Within	X	X	X		X	X	X	X	X	X	X	X				X
Partnership with Licensure Programs	X	X	X		X	X	X		X	X						X

Finding 9

Elementary school leaders expressed the need for increased division level support for provisionally licensed teachers.

Analysis to Support Finding 9. Twelve elementary school leaders expressed the need for dedicated support personnel to assist in the instructional coaching and professional development of provisionally licensed teachers (P3, P4, P5, P6, P7, P8, P9, P10, P11, AP1, AP3, AP4). Research suggests that new teachers benefit from being in a learning community with other new teachers to problem-solve and sharpen their skills (Bland et al., 2023). Hallam et al. (2012) reported that new teachers were offered a collaborative of stakeholders (including in-school mentors, collaborative professional learning communities, instructional coaches, and school leaders) as a support network.

In Finding 6, elementary school leaders expressed an increased workload and a deficiency of time for supporting provisionally licensed teachers. As a result, five school leaders emphasized the need for a dedicated instructional coach to offer ongoing, hands-on support to provisionally licensed teachers who need this level of support (P1, P6, P7, P10, AP1). One principal (P4) expressed, “It would be great if every school could have an instructional coach dedicated to just coaching teachers.” She said having this support person would allow her “to concentrate on broader school management and improvement initiatives, rather than day-to-day

instructional support.” Another school leader (P8) emphasized the benefit of having dedicated instructional coaches focused solely on providing support rather than splitting their roles with other responsibilities. Four school principals expressed that the funding for this position would be best at the division level because they did not have the funding required to staff this position in their school budgets (P6, P9, P10, P11).

Five school leaders noted a need for supporting provisionally licensed teachers in completing the licensure requirements (P2, P5, P6, P7, P9). One school principal (P7) described how one of her provisionally licensed teachers was struggling with passing a component of the PRAXIS exam. This principal utilized local community resources and coordinated targeted exam support to help her teacher pass the PRAXIS. She expressed a lack of support resources available to provisionally licensed teachers in her division and stated, “It would be nice if there were something or someone that could provide a training or several sessions to support.” Two school principals emphasized that school leaders and provisionally licensed teachers should understand and remember the timeline to complete all the requirements (P2, P6). One school principal (P2) said, “They don't understand that you have 3 years to finish this coursework for the provisional license or for them to know your provisional license is going to expire in 3 years.” She expressed a need for external support in helping provisionally licensed teachers set goals and track their progress. This principal felt that division level support and networking opportunities would be beneficial in supporting these teachers in completing the requirements on time.

Four elementary school leaders shared their perceptions of the importance of networking and peer support for provisionally licensed teachers (P1, P7, AP1, AP3). These leaders emphasized the need for regular, structured support meetings and opportunities for peer networking with other provisionally licensed teachers for support. One principal (P1) observed

the benefit of networking meetings: “There would be a huge benefit for meetings where they could meet with other provisionally licensed teachers throughout the division and to see what they are going through to form a support network.” An assistant principal (AP1) noted that it would be a benefit for provisionally licensed teachers to have “meetings where they could meet with other provisionally licensed teachers throughout the county to see what they are going through.” Additionally, three leaders mentioned networking as an essential structure for developing and retaining provisionally licensed teachers (P1, P10, AP1). One principal (P1) described the benefit of networking meetings:

There would be a huge benefit for meetings where they could meet with other provisionally licensed teachers throughout the division and to see what they are going through to form a support network. A day of professional leave multiple times a year for division level, networking meetings, including lunch, would make them feel supported and appreciated, and could lead to retention.

Summary of Finding 9. Elementary school leaders expressed the need for increased division level support for provisionally licensed teachers. A large portion of this finding was developed from responses to interview question 10: *What additional support or resources do you need to help support these teachers?* Additional context was taken from interview question 6: *What have been your biggest successes in supporting PLT?*, interview question 7: *What have been your biggest challenges in supporting PLT?*, and interview question # 11: *Is there anything you would like to add about supporting provisionally licensed teachers?* to develop finding 9. Table 13 contains an overview of the perceptions of division level support for provisionally licensed teachers by participants that supports this finding.

Table 13*Elementary School Leaders' Perceptions of Division Level Support for Provisionally Licensed**Teachers*

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Dedicated Personnel			X	X	X	X	X	X	X	X	X	X		X	X
Licensure Support		X			X	X	X		X						
Networking Opportunities	X					X	X			X		X			

Finding 10

Elementary school leaders reported using targeted professional development with provisionally licensed teachers.

Analysis to Support Finding 10. Focused and ongoing professional development is essential for improving provisionally licensed teachers' management and instructional skills. All 15 elementary school leaders reported on the targeted professional development deemed essential for provisionally licensed teachers (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, AP1, AP2, AP3, AP4). Novice teachers should use their judgment to select professional development that meets their needs (Schatz-Oppenheimer, 2017). According to Rose and Sughrue (2021), professional development is impactful when it is relevant to the needs of the teacher, indicating a need for targeted professional development support.

Classroom management was deemed the highest priority topic to train provisionally licensed teachers by all elementary school leaders who participated in this study (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, AP1, AP2, AP3, AP4). These leaders emphasized that provisionally licensed teachers needed to be trained in developing structural systems that work in the classroom and help teachers find their authoritative and effective teaching presence. One principal (P4) stated, "Classroom management is always something that tends to be difficult for provisionally licensed or first year teachers." Ten school leaders (P2, P4, P5, P6, P10, P11, AP1,

AP2, AP3, AP4) mentioned they started with classroom management, including specific, actionable strategies on basic management techniques such as setting structures and routines, expressing expectations, structured transitions, attention grabbers, and handling challenging student behaviors. One principal (P10) stated, “If they don't have classroom management, it doesn't matter whether they know the content,” showing the priority of professional development for classroom management over instructional practices for provisionally licensed teachers. Another principal (P3) described how important classroom management is to provisionally licensed teachers and conducted a book study:

I would say classroom management is the number one thing. I can teach instruction to anybody. I can hand you a curriculum, and we can work on those strategies to improve learning. But I think that management: Are the children listening, are they being respectful, are they following those expectations, and how are you being very clear with setting those expectations and not too rigid with your expectations?

According to this school leader (P8), provisionally licensed teachers need this targeted professional development because they are “missing hands-on experience from student teaching that provides practical insights into classroom management and instructional delivery.” An assistant principal (AP4) shared the belief that “once classroom management and relationships are established, other instructional aspects fall into place more easily.”

Ten elementary school leaders shared the importance of curriculum and lesson planning as a topic for targeted professional development for provisionally licensed teachers (P1, P2, P3, P4, P5, P6, P8, P9, AP2, AP3). One school leader (AP3) discussed starting with Virginia's new state curriculum standards in literacy and math:

Helping provisionally licensed teachers understand those standards, breaking down those standards, the essential knowledge, and what they're teaching. If they need that extra support with their literacy instruction, then we can get the literacy specialists or the reading teacher into their classrooms to support that instruction.

One school principal (P11) indicated a specific focus on the needs of provisionally licensed teachers during planning sessions, ensuring they grasp essential planning components and can ask questions. Another principal (P1) discussed modeling different lesson planning structures and ensuring that provisionally licensed teachers have lesson planning times set up on the calendar each week. One leader (P2) detailed how lesson plans are talked through, and the plans would be “role played.” As they were digging deep into the plans, they would discuss, “If you say the teacher will do this, what does that look like, and [the teacher] would walk them through what it looks like.”

Six elementary school leaders (P4, P7, P8, P9, P11, AP4) discussed targeted professional development in instructional practices for provisionally licensed teachers. One principal (P7) stated, “A lot of our provisionally licensed teachers don’t necessarily understand what’s developmentally appropriate at different ages for kids.” This school principal (P9) stated, “I think engagement is [topic] 1A and classroom management is 1B because I do believe that the better the classroom engagement, the less a distraction.” Another school principal (P4) shared that her school’s instructional professional development would be for small group instruction: “Teaching teachers that the biggest bang for your buck is small group instruction...and teaching [teachers] high leverage instructional practices for providing that targeted intervention for students.”

Summary of Finding 10. Elementary school leaders reported using targeted professional development with provisionally licensed teachers. The finding was mainly developed using responses from interview question 5: *What are some of the topics of focus you can recommend in supporting your PLT?*, with additional context pulled from interview question 1: *What strategies do you use or recommend for supporting the license teachers in elementary schools?*, interview question 3: *What are some of the ways that your administration dedicates time to supporting provisionally licensed teachers?*, interview question 4: *What does the structure of your meetings with PTL look like?*, interview question 7: *What have been your biggest challenges in supporting PLT?*, and interview question 8: *How does supporting PLT differ from supporting traditionally licensed new teacher support?* used to develop finding 10. Classroom management was determined to be the most important topic for provisionally licensed teachers by all elementary school leaders. Ten elementary school leaders discussed the topic of curriculum and lesson planning for targeted professional development. Six school leaders mentioned instructional practices as another important topic for targeted professional development for provisionally licensed teachers. Table 14 contains an overview of the perceptions of topics for professional development by participants that supports this finding.

Table 14

Elementary School Leaders' Perceptions of Topics for Targeted Professional Development

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	AP1	AP2	AP3	AP4
Classroom Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Curriculum and Lesson Planning	X	X	X	X	X	X		X	X				X	X	
Instructional Practices				X			X	X	X		X				X

Data Points

Additional information shared by elementary school leaders provided a more thorough understanding of their perceptions and experiences. Less than half of the participants in this

study expressed these perceptions or experiences. This information was important to the study and was, therefore, represented as data points, not findings for the study.

Data Point 1

Six administrators mentioned using a structured and comprehensive onboarding process for their provisionally licensed teachers (P3, P5, P7, P8, P11, AP2). These school leaders discussed following a division level structured program. One assistant principal (AP2) stated, “I am in charge of the new teacher induction program (NTIP), and I plan a new teacher work week.” She explained how she runs this program during the school year: “I meet with these new teachers once a month, and I frequently send out updates and communication from the NTIP office.” Similarities in these structured induction programs include regularly set meetings, set agendas, and predetermined topics covered based on guidance provided at the division level. Five of the six participants had appointed someone other than themselves as a leader of this program (P3, P5, P7, P8, P11).

Data Point 2

Three school leaders were reflective in their leadership of induction practices for provisionally licensed teachers (P3, P6, AP1). These leaders discussed the need to reconsider their induction practices for provisionally licensed teachers. Two leaders used the term “one size fits all” when describing their support. One school principal (P6) stated, “I think this is an area of opportunity for us.” When asked about differentiation of support, another principal (P3) stated, “So, that's thought-provoking, because I do think there need to be some different things to differentiate for them, and we haven't done that.”

Four school leaders mentioned gaining some benefit from the timing and participation in this research study (P2, P3, P6, AP2). One school principal (P2) stated, “I'm glad that you

brought it to my head that we need to think about what they're doing beyond the day-to-day work.” Another school leader (P3) said:

I mean, if you hadn't asked me these questions, I don't know that it would have popped into my mind that I should be thinking differently. Where the provisionally licensed teacher, I think we take that for granted. So, it's a compelling question to ask, and I do feel like there needs to be more. It's a great topic, and I can't wait to read what you come up with. I need some ideas.

These leaders recognized the need to address and implement changes at the school-level to improve support structures for provisionally licensed teachers.

Summary

This chapter presented 10 findings. Elementary school leaders shared their perceptions and experiences in supporting provisionally licensed teachers. All perceived mentoring, coaching, and targeted professional development as important induction supports for the success of their provisionally licensed teachers. Most mentioned peer observations and open communication as effective in supporting the professional development of provisionally licensed teachers. Many discussed resource management, balancing the support workload, and the career development of provisionally licensed teachers. Several expressed the need for ongoing and increased division level support for provisionally licensed teachers. Additionally, some noted the use of a structured induction program. Others emphasized the importance of relationships-building with provisionally licensed teachers. A few reflected on their leadership regarding supporting provisionally licensed teachers and the timeliness of participating in this study. Chapter 5 summarizes the findings, implications of this study, recommendations for future research, and reflections.

Chapter 5: Findings, Implications, and Conclusion

Introduction

The purpose of this qualitative study was to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they provide provisionally licensed teachers. The research question guiding this study was: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers? The sub-question was: How do elementary school leaders differentiate induction support for provisionally licensed teachers?

The research addressed the gap in the literature regarding elementary school leaders' perceptions and experiences of supporting provisionally licensed teachers through induction. The research enriched the literature by sharing the findings on administrators' perceptions of essential induction structures such as mentoring, coaching, and peer observations. In addition, perceptions on priority topics for professional development, the importance of open communication, and the need for division level support for provisionally licensed teachers were offered by administrators. This chapter provides an overview and discussion of findings, implications for practitioners and policymakers, and recommendations for future research.

Discussion of Findings

In this research, a finding was deemed major if more than half of all participants' responses contained similar themes. Findings 1, 2, and 3 address elementary school leaders' perceptions of important induction support structures for provisionally licensed teachers and connect to research question 1. Findings 4, 5, 6, and 7 focus on school leaders' responsibilities in supporting induction and connect to research question 1. Finding 8 reflects school leaders'

perception of success in career development and relates to research question 1. Finding 9 identifies areas where school leaders determined the need for division level support and connects to research question 1. Finding 10 addresses the need for differentiated professional development and relates to research question 2. All findings align with research from the literature review.

Findings for Research Question 1

Findings 1 through 9 addressed research question 1: What are the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers? Each related finding, summary, and connection to the literature-reviewed research are discussed below.

Discussion of Finding 1. Elementary school leaders perceived mentoring as an important support structure in supporting the professional growth of provisionally licensed teachers (Table 5).

All elementary school leaders interviewed (100%, N=15) reported that mentoring was integral to induction and had assigned mentors to their provisionally licensed teachers. Strategic assignment of mentors and consideration when pairing mentors with mentees (60%, n=9) to ensure a good fit was discussed frequently by elementary school leaders. Characteristics of a strong induction program are assigning quality mentors to grow their mentee professionally (Bland et al., 2014; Frels et al., 2013; Hallam et al., 2012; Huling-Austin, 1998; LoCascio et al., 2016; Maready et al., 2021; Mullen et al., 2022; Richter et al., 2013; Schatz-Oppenheimer, 2017; Spooner-Lane, 2017; Stanulis et al., 2012; Warsame & Valles, 2018). Assigning mentors based on the grade level (53%, n=8) was a common practice among school leaders. This aligns with the literature on high-quality mentoring practices and support for novice teachers (Frels et al., 2013; Maready et al., 2021). A structured mentoring approach (67%, n=10) to support provisionally

licensed teachers was also mentioned in this study. Participants reported tailoring mentoring support (53%, n=8) based on the individual needs of the provisionally licensed teacher rather than applying a one-size-fits-all approach. These data align with the literature on quality mentoring practices, including strategic mentor selection and a structured approach, foster a more profound professional growth, enhance skill development, and ensure more effective, long-term career success (Bland et al., 2014; Frels et al., 2013; Hallam et al., 2012; Huling-Austin, 1998; LoCascio et al., 2016; Maready et al., 2021; Mullen et al., 2022; Richter et al., 2013; Schatz-Oppenheimer, 2017; Spooner-Lane, 2017; Stanulis et al., 2012; Warsame & Valles, 2018).

Discussion of Finding 2. Elementary school leaders perceived coaching as valuable in supporting provisionally licensed teachers (Table 6).

All elementary school leaders (100%, n=15) reported providing coaching support through observations and feedback for provisionally licensed teachers which aligns with the literature on coaching novice teachers (Bland et al., 2014; Mullen et al., 2021; NTC, 2018; Wilhelm et al., 2021). Participants in this study discussed the use of ongoing training and coaching cycles (73%, n=11) and using data to inform support strategies (33%, n=5) for provisionally licensed teachers, which aligns with the NTC teacher induction program standards (NTC, 2018). In the literature review prior to the study, coaching for new teachers was discussed as a part of the induction programming for new teachers (Bland et al., 2014; Mullen et al., 2021; NTC, 2018; Whalen et al., 2019; Wilhelm et al., 2021). Some leaders described the delicate balance between school leaders conducting observations as formative coaching support rather than evaluative or being perceived as punitive (20%, n=3), which aligns with the literature (Kutsyuruba et al., 2014). School leaders reported utilizing the support of a collaborative team (67%, n=10), leveraging the

strengths and expertise of the various school personnel such as literacy specialists, math specialists, instructional designers, instructional coaches, and other qualified veteran teachers. The data also aligned with the NTC teacher induction teacher standard, which encourages program and key leaders to work collaboratively to share observation findings and work to improve beginning teacher success (NTC, 2018). Targeted instructional support from instructional specialists (47%, n=7) based on coaching feedback contributes to improved teaching practices for provisionally licensed teachers. The variability of teacher responses to feedback (53%, n=8) and the impact it made on teacher improvement (40%, n=6) was expressed by participants. Much of the literature reviewed on coaching mentioned the need for frequent and constructive coaching feedback (Bland et al., 2014; Mullen et al., 2021; Wilhelm et al., 2021). However, this literature did not explore teacher's receptivity to feedback as a factor in success or improvement.

Discussion of Finding 3. Elementary school leaders perceived peer observations as a beneficial way to improve teaching practices and build confidence in provisionally licensed teachers (Table 7).

Ten elementary school leaders (67%, n=10) provided opportunities for provisionally licensed teachers to conduct peer observations as an induction support strategy. The literature supports peer observations as high-quality induction support that has been shown to enhance beginning teachers' growth and efficacy (Bland et al., 2023; NTC, 2018; Wilhelm et al., 2021). Leaders in this study felt that peer observations improved teaching practices and built confidence (47%, n=7). Time and finding coverage (33%, n=5) were viewed as a logistical challenge for leaders to navigate in supporting peer observations. Allowing novice teachers to participate in interschool observations (20%, n=3) was mentioned to broaden teachers' learning, especially in

schools that have specialty classrooms such as adaptive special education or prekindergarten classes. The literature confirms that peer observations as an induction support strategy provide valuable insights for new teachers, helping them refine their teaching strategies, improve classroom management, and build confidence through constructive feedback and collaboration (Bland et al., 2023; NTC, 2018; Wilhelm et al., 2021).

Discussion of Finding 4. Elementary school leaders expressed the importance of open communication with provisionally licensed teachers (Table 8).

Eleven school leaders (73%, n=11) expressed the value of maintaining open communication with their provisionally licensed teachers. The significance of personalized communication was deemed as an important aspect of building relationships (40%, n=6) and is confirmed in Mullen and Fallen (2022). Strong personal relationships can also lead to more open and effective feedback. Participant responses emphasized the importance of frequent personalized interactions and check-ins (40%, n=6) and maintaining open communication (27%, n=4). When teachers feel supported and experience strong communication from their administration, they are twice as likely to remain at their school and in the profession (Carver-Thomas & Darling-Hammond, 2017). Building interpersonal relationships and fostering open communication are essential components of effective support and mentoring for new teachers (Schatz-Oppenheimer, 2017).

Discussion of Finding 5. Elementary school leaders reported the importance of resource management when working with provisionally licensed teachers (Table 9).

Leaders in this study (73%, n=11) shared that the effective management of resources is an important aspect in supporting provisionally licensed teachers. Efficient allocation of time (53%, n=8) for meetings and support was determined to be an important factor in supporting

provisionally licensed teachers. Similar to the study conducted by Frels et al. (2013), the themes of personal time commitment to meet with new teachers and allotting time for new teachers to meet with mentors were also identified in this research study. Another important function of the school leader's role in resource management is the allocation of funding (67%, n=10) for new teacher induction support, which confirms the positive impact school leaders' support has on new teachers' (Wilhelm et al., 2022). Participants described being flexible and responsive in managing resources (27%, n=4) based on the ongoing feedback and emerging needs of provisionally licensed teachers. Mullen and Fallen (2022) found that school leaders were responsible for equitably allotting resources to benefit new teachers. It should be noted that the leaders of Title 1 schools expressed they were able to fund instructional coaches and behavior specialists with their robust budgets and that the leaders of non-Title 1 schools were not afforded the same opportunity. Although this may seem inequitable, the Title 1 schools also had larger provisionally licensed teacher populations in comparison to non-Title 1 schools.

Discussion of Finding 6. Elementary school leaders acknowledged the challenge of managing the administrative workload while providing quality support for provisionally licensed teachers (Table 10).

Ten elementary school leaders (67%, n=10) acknowledged the challenge of balancing the increased workload of supporting provisionally licensed teachers. Insufficient time (47%, n=7) in comparison to the high need for support was expressed by participants. The support workload was discussed (53%, n=8) but varied depending on the number of provisionally licensed teachers. Supporting a large, diverse staff (20%, n=3) required leaders to find creative solutions to ensure support for their increasing numbers of provisionally licensed teachers. Additionally, school leaders (53%, n=8) mentioned having the increased responsibility of training their

provisionally licensed teachers. Research confirms that the workforce shortages, which existed even before COVID-19, were exacerbated by the teaching conditions during the pandemic, increasing the demand and the number of new hires (Bland et al., 2023; JLARC, 2022).

Responses from the current study support Wilhelm et al.'s (2022) suggestion that the primary goals of school leaders should focus on managing the organization and identifying and allocating appropriate resources rather than immediately providing direct instructional support.

Discussion of Finding 7. Elementary school leaders reported success in the career development of individuals who become provisionally licensed teachers (Table 11).

Elementary school principals in this study (80%, n=12) discussed their successes in the career development of some support staff by supporting and encouraging instructional assistants to pursue their provisional licenses. This confirms Bland et al. (2023) on school leaders “growing their own” and encouraging non-certified staff within their schools to enroll in alternative licensure programs to help combat the teacher shortage. School leaders noted partnerships with licensure programs (60%, n=9) such as iteach, GCU, and local university residency programs as a positive for their ease of access and support, confirming Bland et al.'s research (2023).

Discussion of Finding 8. Elementary school leaders acknowledged the importance of the school culture and community in supporting provisionally licensed teachers (Table 12).

Elementary school leaders strongly supported creating a supportive school culture and community (80%, n=12). Leaders felt that the key to creating a supportive school culture and community was through family engagement, strong communication, and relationship building, which confirmed Mullen and Fallen (2022). Many school leaders noted that they rely on the collaborative support (67%, n=10) of specialists and veteran teachers in supporting provisionally licensed teachers, confirming Hallam et al.'s research (2012). Additionally, Hallam et al.'s

(2012) study found that the proximity of an in-school support community is more effective due to the established relationships and knowledge of the norms of the school. Family engagement was an area of support school leaders identified to assist provisionally licensed teachers (47%, n=7). Participants emphasized the importance of building a strong community of support (53%, n=8) for their provisionally licensed teachers. This aligns with Bland et al.'s (2023) study, which found that new teachers gain valuable benefits from participating in a learning community with fellow new educators, where they can collaborate on problem-solving and refine their skills. Additionally, school leader responses from this study confirm Mullen and Fallen's (2022) findings that encourage relationship building and creating a positive school culture.

Discussion of Finding 9. Elementary school leaders expressed the need for increased division level support for provisionally licensed teachers (Table 13).

Elementary school leaders expressed the need for dedicated support personnel (80%, n=12) to assist in the instructional coaching and professional development of provisionally licensed teachers, which confirms the findings of Wilhelm et al. (2022) as a district-level initiative. School leaders emphasized the need for a dedicated instructional coach (33%, n=5) to offer ongoing, hands-on support to provisionally licensed teachers who need this level of support. In addition, these leaders expressed that the funding for this position would be best at the division level because they did not have the funding required to staff this position in their school budgets. This finding confirms Mullen and Fallen (2022) for more district support including financial compensation for loyal employees shouldering the bulk of support. However, these were not leaders of Title 1 schools and were not afforded the same opportunity to hire support personnel as their Title 1 principal colleagues. Participants (33%, n=5) noted that a need for supporting provisionally licensed teachers in completing the licensure requirements should be

a division initiative. School leaders (27%, n=4) shared their perceptions of the importance of networking and peer support for provisionally licensed teachers, which supports the findings of Bland et al. (2023).

Findings for Research Question 2

Discussion of Finding 10. Elementary school leaders reported using targeted professional development with provisionally licensed teachers (Table 14).

Bland et al. (2023) state that the potential for professional development to close the preparation gaps in teachers from non-licensure paths makes it an essential part of the puzzle. All elementary school leaders reported on the targeted professional development (100%, N=15) deemed essential for provisionally licensed teachers, which confirms Rose and Sughrue (2021) and Schatz-Oppenheimer (2017). These studies state that professional development is impactful when novice teachers select the training relevant to their needs (Rose & Sughrue, 2021; Schatz-Oppenheimer, 2017). This research confirmed that classroom management was deemed the highest priority topic (100%, N=15) to train provisionally licensed teachers, which supported Darling-Hammond and Sykes (2003). Similar to the study by Ingersoll & Strong (2011), school leaders (67%, n=10) mentioned they started with classroom management, including specific, actionable strategies. Responses from elementary school leaders in this study confirmed Whalen et al. (2019), which expressed that curriculum and lesson planning (67%, n=10) and instructional practices (40%, n=6) were topics for targeted professional development for novice teachers.

Practitioner Implications

School leaders should consider the findings from this research when planning for induction support for provisionally licensed teachers in their schools. Division level support specialists can consider these findings when planning induction support for provisionally

licensed teachers. The implications for school and division-level leaders are included with matching finding numbers for context and are organized based on practitioner responsibilities.

School Leaders

1. Formalize mentorship and coaching programs to pair each provisionally licensed teacher with a trained mentor and provide personalized professional development, supporting their growth and integration into the school environment (findings 1, 2, 6, and 10).
2. Promote structured peer observation practices, giving provisionally licensed teachers opportunities to observe experienced teachers and receive constructive feedback (findings 3 and 4).
3. Establish and maintain consistent communication with provisionally licensed teachers through regular meetings, feedback sessions, and open forums to foster transparency, trust, and continuous professional dialogue (finding 4).
4. Strategically allocate resources such as teaching materials and professional development funds for PLTs while delegating administrative tasks to ensure that provisionally licensed teachers receive adequate support without overwhelming staff (findings 5 and 6).
5. Cultivate an inclusive school culture that supports provisionally licensed teachers by encouraging collaboration, recognizing their achievements, and using data-driven professional development to meet their specific needs and advance their careers (findings 7, 8, and 10).

Division-Level Leaders

6. Design and provide division-wide professional development opportunities for provisionally licensed teachers focusing on skill-building in key areas such as classroom management, lesson planning, and differentiation (findings 9 and 10).

7. Create systems facilitating division-wide peer observations and networking opportunities across schools, allowing provisionally licensed teachers to observe teachers in other schools and share best practices across the district (finding 3).
8. Ensure that schools have the necessary financial and material resources to effectively support provisionally licensed teachers, including allocating funding for professional development, instructional materials, and adequate personnel to support mentorship and coaching initiatives (findings 1, 2, 5, 6, and 10).
9. Establish support systems to monitor the progress toward provisional licensure completion, provide professional development, and offer targeted testing support based on teachers' needs via feedback (findings 4, 8, 9, and 10).

Policy Implications

The Virginia state level policy (Virginia Department of Education, 2021) for new teacher mentoring support provides 10 guidelines for school divisions to implement within their new teacher induction support program. The findings from this research study have policy implications at the state and district levels. This section will identify policies that local school boards can support and implement to benefit school leaders and provisionally licensed teachers.

1. Allocate funding for instructional coaching by hiring coaches or training existing staff, as coaching is highly valued (findings 2, 5, and 9).
2. Establish career advancement incentives for provisionally licensed teachers, including pathways to licensure, tuition reimbursement, and targeted professional development aligned with their career goals (findings 8 and 10).

3. Mandate targeted professional development hours for provisionally licensed teachers, tailored to their subject areas and teaching needs, as part of their licensure requirements (findings 8 and 10).

To effectively leverage these policy recommendations, school leaders can advocate for partnerships between the Virginia Department of Education and their local school boards to ensure consistent support for provisionally licensed teachers. Additionally, school leaders can highlight the importance of using recruitment and staffing data to assess and provide feedback on these initiatives to refine policy implementation and strengthen teacher retention and effectiveness.

Suggestions for Future Research

This study focused on the perceptions and experiences of elementary school leaders who support provisionally licensed teachers in Virginia. Future research could be conducted as comparative research across various school divisions in the United States to identify best practices and challenges in supporting provisionally licensed teachers. Since the teacher shortage is a worldwide issue, school leaders' perspectives may provide diverse insights on how best to support teachers seeking licensure using an alternative path. This might result in an adaptable framework for effective support that can be applied across various educational settings.

Future research could also include focus groups for school leaders to share their experiences supporting provisionally licensed teachers. This research method could provide a deeper understanding of, and solicit possible solutions for, the benefits and challenges that school leaders identify in individual or focus group interviews. By fostering an open dialogue among participants, researchers can uncover insights from focus group responses. Such discussions could reveal common themes related to mentorship practices, resource allocation,

and professional development opportunities. Additionally, the interactive nature of focus groups may encourage school leaders to reflect on their own practices and collaboratively brainstorm innovative strategies to enhance the support system for these teachers, ultimately leading to improved outcomes.

Future researchers may consider conducting longitudinal studies to track the career trajectories of provisionally licensed teachers over time, examining how support systems, like mentoring, coaching, and professional development, influence their advancement and satisfaction in the teaching profession. A longitudinal study could track the support provided to provisionally licensed teachers throughout the 3-year time frame to progress from provisional to full licensure.

Conclusions

This research study examined the perceptions and experiences of elementary school leaders in relation to the induction programming and support they provided provisionally licensed teachers. These findings are timely due to the increasing number of provisionally licensed teachers who have entered the field. These findings highlight the critical role of structured support systems for provisionally licensed teachers in enhancing their professional growth and integration into the school environment. The emphasis on formal mentorship and coaching programs underscores the need for schools to create supportive relationships that facilitate skill development and confidence among new educators. Likewise, recognizing peer observations as a valuable practice reinforces the importance of collaborative learning and feedback in improving instructional practices.

As the teacher shortage continues, school and division-level leaders should ensure strategic resource management that guarantees provisionally licensed teachers have the necessary tools and support without placing undue stress on current staff. Not to mention, nurturing a positive school culture and recognizing the accomplishments of provisionally licensed teachers can greatly enhance their job satisfaction and dedication to the teaching profession. Furthermore, district-level policies should prioritize career development incentives, tailored professional development, and robust support systems to empower provisionally licensed teachers and enhance their effectiveness. By investing in these areas, educational leaders are supporting provisionally licensed teachers who are well-equipped to thrive in their roles and positively contribute to the education of students.

Conducting this study was both challenging and rewarding, and I was guided with the strong support of my doctoral committee and peers. In the process, I myself served as a peer

mentor to doctoral cohorts and presenter of my research to classes through Dr. Mullen's invitations. The experience of conducting interviews with elementary school leaders allowed me to access firsthand the real-world ideas for supporting provisionally licensed teachers. It was exciting to contribute to a conversation that is relevant to the challenges many leaders are currently facing. The process shaped my research skills and gave me a meaningful sense of accomplishment, knowing my work could offer fresh insights into the induction support provided to provisionally licensed teachers, an important issue for school leaders.

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Appendices

Appendix A: Literature Review Table

	Author/Year/ Title	Purpose	Method/ Keywords/ THEME	Findings
1	Bland, J. A., Wojcikiewicz, S. K., Darling-Hammond, L., & Wei, W. (2023). Strengthening pathways into the teaching profession in Texas: Challenges and opportunities. (Bland et al., 2023)	Summarizes teacher workforce challenges and recent initiatives in Texas	TEACHER SHORTAGES ALTERNATIVE CERTIFICATION	<ul style="list-style-type: none"> ● A growing need for teachers ● High levels of teacher attrition, compounded by the effects of the pandemic ● Increasing reliance on alternative certification programs that have low program completion rates and high attrition rates from the teaching profession. ● A shrinking pool of fully credentialed new teachers. ● Increasing reliance on interns and, more recently, on uncertified teachers. ● Ongoing teacher shortages have led to the creation of a wide range of pathways into the profession, featuring varying types and amounts of training.
2	Bland, P., Church, E., & Luo, M. (2014). Strategies for Attracting and Retaining Teachers (Bland et al., 2014)	Explain how school leaders can attract quality teaching staff, provide effective new teacher induction programs, and establish procedures that will assist in retaining the best of the best teaching staff.	Report <i>Keywords:</i> teacher retention, teacher recruitment, new teacher induction programs MENTORING PROGRAMS: NEED AND DESIGN TEACHER ATTRITION DATA	<ul style="list-style-type: none"> ● qualified teachers must be improved through on-target, on-time, and on-task staff development programs, and these teachers must be retained for the benefit of the students the school division serves ● Half of all urban teachers leave the profession within their first three to five years, and half of those rated as being in the top 20 percent of all teachers leave within five years. ● Surveys find that lack of support is a key reason why teachers change schools or leave the profession (Ingersoll, 2003). ● A strong induction program for new staff members must assign a strong coaching mentor who can grow professionally as much as those they mentor; support and extend innovative practice through active research; and support collegial discussion and learning among experienced staff, new staff, and the principal through rigorous study groups. ● mentoring programs must exist separately from evaluative programs ● mentoring helps new teachers adjust to the organization and philosophy of the school, fosters self-confidence, and gives new teachers encouragement to not only remain in the division, but remain in the profession as well, and allows new teachers to expand their teaching knowledge and skills.

3	<p>Cardichon, J., Darling-Hammond, L., Yang, M., Scott, C., Shields, P. M., & Burns, D. (2020). <i>Inequitable opportunity to learn: Student access to certified and experienced teachers.</i> (Cardichon et al., 2020)</p>	<p>Analysis of 2 years of data from the Civil Rights Data Collection</p>	<p>Definitions for certification, new teacher, induction</p> <p>CERTIFIED TEACHER DATA</p>	<ul style="list-style-type: none"> ● Students in schools with a high proportion of students of color have less access to certified teachers than those in schools with a low proportion of students of color. ● Students in schools with high enrollment of students of color have less access to certified teachers than their white peers regardless of locale. ● Students in schools with high student of color enrollment have less access to experienced teachers. ● Strengthening federal policies to encourage the equitable distribution of more experienced, certified teachers and discourage the concentration of novice and uncertified teachers in high-need schools. ● Strengthening educator pipelines by implementing and maintaining federal and state loan forgiveness and service scholarship programs that can recruit, prepare, and retain high-quality teachers in the academic fields and in the schools in which they are most needed.
4	<p>Carver-Thomas, D. & Darling-Hammond, L. (2017).</p> <p>Teacher turnover: Why it matters and what we can do about it.</p> <p>(Carver-Thomas & Darling-Hammond, 2017)</p>	<p>Analysis of 2012 schools and staffing survey</p>	<p>Residency Programs, High Quality Mentoring and induction</p> <p>SCHOOL LEADERSHIP INVOLVEMENT IN INDUCTION</p> <p>TEACHER SHORTAGE ALTERNATIVE CERTIFICATION</p>	<ul style="list-style-type: none"> ● Turnover rates are 50% higher for teachers in Title I schools, which serve more low-income students. Mathematics and science teacher turnover rates are nearly 70% greater in Title I schools than in non-Title I schools, and turnover rates for alternatively certified teachers are more than 80% higher ● Teachers who enter the profession through alternative certification pathways—who have had less coursework and student teaching, on average, than teachers who are prepared through traditional programs—are 25% more likely to leave their schools and the profession, even after controlling for their students, schools, and teaching conditions ● uncertified teachers who are often hired as a last resort when fully certified teachers are not available. In 2013–14, the quarter of schools enrolling the most students of color nationally had four times as many uncertified teachers as the quarter of schools enrolling the fewest students of color. Uncertified teachers were also more common in schools serving the most students eligible for free and reduced-price lunch than in those with the fewest.
5	<p>Casely-Hayford, J., Björklund, C., Bergström, G., Lindqvist, P., & Kwak, L. (2022). What makes teachers stay? (Casely-Hayford et al., 2022)</p>	<p>identify individual and contextual factors associated with teachers' intention to remain in the profession</p>	<p>Factors of TEACHER RETENTION</p>	<ul style="list-style-type: none"> ● teachers' retention intention was mainly explained by individual-level factors, predominantly by health-related quality of life, and only to a small extent by work- and socio-organizational-level factors ● Individual factors and teacher's intention to remain in the profession; teachers' perceived health state is an important facet influencing their decisions regarding whether they choose to continue teaching or not ● Assessing job demands is an important aspect of work-stress models as the balance between job demands and job resources causes either health impairing or health facilitating processes that determine a range of organizational outcomes

6	<p>Constantine, J., Player D., Silva, T., Hallgren, K., Grider, M., and Deke, J. (2009).</p> <p><i>An Evaluation of Teachers Trained Through Different Routes to Certification, Final Report</i> (NCEE 2009-4043).</p> <p>(Constantine et al., 2009).</p>	Study comparing teacher preparation and certification.	ALTERNATIVE CERTIFICATION	<ul style="list-style-type: none"> Reported findings include: (1) Both the AC and the TC programs with teachers in the study were diverse in the total instruction they required for their candidates; (2) While teachers trained in TC programs receive all their instruction (and participate in student teaching) prior to becoming regular full-time teachers, AC teachers do not necessarily begin teaching without having received any formal instruction; (3) There were no statistically significant differences between the AC and TC teachers in this study in their average scores on college entrance exams, the selectivity of the college that awarded their bachelor's degree, or their level of educational attainment; (4) There was no statistically significant difference in performance between students of AC teachers and those of TC teachers; (5) There is no evidence from this study that greater levels of teacher training coursework were associated with the effectiveness of AC teachers in the classroom; and (6) There is no evidence that the content of coursework is correlated with teacher effectiveness.
7	Darling-Hammond, L. (2020). Accountability in teacher education (Darling-Hammond, 2020)	Article	Teacher Preparation and Effectiveness	<ul style="list-style-type: none"> elements of teacher preparation program quality and argues that professional standards can leverage greater quality if they are incorporated into professional policies governing accreditation and licensure that encourage schools of education to adopt the practices that will enable success. teacher assessment strategies –such as standards-based performance assessments that have been found not only to measure features of teaching associated with effectiveness, to help develop effectiveness at the same time; performance-based accreditation strategies – including evidence about their preparation from candidates themselves through surveys that reveal their experiences in preparation; and investments in the professional development school partnerships that will enable teacher education to firmly connect theory and practice in powerful ways, much as the teaching hospital has done for medicine.
8	<p>Darling-Hammond, L., & Sykes, G. (2003).</p> <p>Wanted: A national teacher supply policy for education: the right way to meet the "highly qualified teacher" challenge</p> <p>(Darling-Hammond &</p>	<p>Study the maldistribution of teachers and examine its causes</p> <p>new vision of the teacher labor market and the framing of a national teacher</p>	<p>Report</p> <p>HISTORICAL DATA</p> <p>AFFECTS ON STUDENT ACHEIVEMENT</p>	<ul style="list-style-type: none"> While some schools have dozens of qualified applicants for each position, others mostly those with poor and minority pupils suffer from shortfalls disparities in pay and working conditions, interstate barriers to teacher mobility and inadequate recruitment incentives to bureaucratic hiring systems that discourage qualified applicants, transfer policies that can slow hiring and allocate staff inequitably, and financial incentives to hire cheaper, less qualified teachers. Retaining teachers is a far larger problem than training new ones and a key to solving teacher “shortages.” the ability of schools to attract and retain well-trained teachers is often a function of forces beyond their boundaries

	Sykes, 2003)	supply policy		<ul style="list-style-type: none"> ● those providing little training and meager support for new teachers fail to prepare teachers to succeed or to stay, thus adding to the revolving door of ill-prepared individuals who cycle through the classrooms of disadvantaged schools, wasting division resources and valuable learning time for their students ● Those who enter teaching without preparation in key areas such as instructional methods, child development and learning theory also leave at rates at least double those who have had such training (NCTAF, 2003, p. 84). ● principals rated the [traditionally trained] beginning teachers as more knowledgeable than the AC interns on the eight program variables: reading, discipline management, classroom organization, planning, essential elements, ESL methodology, instructional techniques, and instructional models
9	Devier, B. H. (2019). Teacher Shortage and Alternative Licensure Solutions for Technical Educators (Devier, 2019)	Predictive Correlation design	TEACHER SHORTAGE ALTERNATIVE CERTIFICATION	<ul style="list-style-type: none"> ● It would appear the more stringent the CTE teacher certification/licensure, the less likely a potentially qualified person would consider teaching ● Licensing agencies across the United States commonly define any licensure path that does not follow traditional teacher education preparation as an alternative ● The preservice classroom experience is the chief difference between traditional and alternative licensure. ● Most states are utilizing alternative certification programs that work to recruit career changers as a way to gain high-quality teachers ● Many alternative licensure preservice teachers gain instructional experience through fieldwork or as part of a full-time teaching position (Birkeland & Peske, 2004). ● alternatively licensed teachers often are hired into full-time teaching positions and build classroom experience on the job
10	Frels, R. K., Zientek, L. R., & Onwuegbuzie, A. J. (2013). Differences of Mentoring Experiences across Grade Span among Principals, Mentors, and Mentees (Frels et al., 2013)	Examine mentoring experiences specific to grade span through the perspective of principals, mentors, and mentees.	Mixed methods research <i>Keywords:</i> mentoring experiences, grade span, mentors' attitudes towards mentoring, mentees' attitudes towards mentoring MENTORING PROGRAMS: NEED AND DESIGN ROLE OF ADMIN IN SUPPORTING	<ul style="list-style-type: none"> ● Mentors' attitudes towards mentoring were statistically significantly more positive than were the mentees' attitudes, although, on average, the attitudes for both groups were positive ● A statistically significant difference in attitudes emerged as a function of grade span, with elementary school mentees reporting the highest levels of motivation to be mentored and the greatest desire to observe veteran teachers. ● Mentees believed they were or were not compatible with their mentors due to the following subthemes: (a) mentors not being accountable for meeting times; (b) mentors not having a common grade level, planning time, content area, or close proximity; and (c) mentors not having common personality characteristics. ● Better Matches from the perspective of mentors, the following subthemes emerged: (a) not having a common grade level, planning time, content area, or close proximity; (b) mentees should be mentored for more than one year but no longer; and (c) single placement ● Time yielded three subthemes: (a) flexibility in content, (b) release time, and (c) workload.

			MENTORING PROGRAMS	<ul style="list-style-type: none"> ● Training for the mentor emerged as a theme for mentees and mentors alike ● principals at the elementary school level had more positive experiences and attitudes toward mentoring than did principals at the secondary level.
11	Glazerman, S., Isenberg, E., Dolfen, S., Bleeker, M., Johnson, A., Grider, M., & Jacobus, M. (2010). <i>Impacts of comprehensive teacher induction</i> (Glazerman et al., 2010)	Determine whether augmenting the set of services districts usually provide to support beginning teachers with a more comprehensive program improves teacher and student outcomes.	Compares retention, preparation, and classroom practices INDUCTION PRACTICES	<ul style="list-style-type: none"> ● During the comprehensive induction program, treatment teachers received more support than control teachers; ● The extra induction support for treatment teachers did not translate into impacts on classroom practices in the first year; ● For teachers who received one year of comprehensive induction, there was no impact on student achievement; ● For teachers who received two years of comprehensive induction, there was no impact on student achievement in the first two years. In the third year, there was a positive and statistically significant impact on student achievement; and (5) ● Neither exposure to one year nor exposure to two years of comprehensive induction had a positive impact on retention or other teacher workforce outcomes
12	Goldrick, L. (2016). <i>Support from the start: A 50-state review of policies on new educator induction and mentoring</i> (Goldrick, 2016)	New Teacher Center monitoring of state policy	NEW TEACHER SUPPORT INDUCTION PROGRAMS	<ul style="list-style-type: none"> ● While all schools and students can benefit from more effective teachers, the power of high-quality induction has special significance for schools that serve a disproportionate number of low-income and minority students. ● Only three states meet NTC's most important criteria for a high-quality system of new teacher support. ● Beginning teachers are inequitably found in schools in high-poverty neighborhoods and communities. ● The most recent data show roughly one in five U.S. classroom teachers are in their first three years on the job. But there are signals that more new educators are staying on the job longer.
13	Gray, L., & Taie, S. (2015). Public school teacher attrition and mobility in the first five years: Results from the first through fifth waves of the 2007–08 beginning teacher longitudinal study	The National Center for Education Statistics (NCES) Beginning Teacher Longitudinal Study (BTLS).	longitudinal study TEACHER ATTRITION DATA	<ul style="list-style-type: none"> ● Among all beginning teachers in 2007–08, 10 percent did not teach in 2008–09, 12 percent did not teach in 2009–10, 15 percent did not teach in 2010–11, and 17 percent did not teach in 2011–12 ● Data on the percentage of teachers who stayed varied by salary range. ● In each follow-up year, the percentage of beginning teachers who were currently teaching was larger among those who were assigned a first-year mentor than among those not assigned a first-year mentor <p>No differences were detected between the percentages of current teachers who started teaching in 2007–08 with a bachelor's degree and those who started teaching in 2007–08 with a master's degree in each of the following years</p>

	(Gray & Taie, 2015)			
14	Hallam, P. R., Chou, P. N., Hite, J. M., & Hite, S. J. (2012). Two Contrasting Models for Mentoring as They Affect Retention of Beginning Teachers (Hallam et al., 2012)	Investigate mentoring models in two divisions. Developing a schoolwide mentoring culture Selecting effective mentors	qualitative and quantitative data comparative case study method to investigate mentoring models <i>Keywords</i> mentoring, mentors, teacher retention, new teacher, beginning teacher MENTORING PROGRAMS: NEED AND DESIGN	<ul style="list-style-type: none"> • Research indicates that mentoring programs help increase the retention of beginning teachers. School administrators may be presented with competing mentoring models, with various sources and types of support, aimed at improving beginning teacher retention. • “coaches” were not as effective as in-school mentors or collaborative teams in increasing retention, possibly because of lack of proximity and personal relationship. • describe and explain mentoring characteristics and different sources of support that benefited the mentoring experience and subsequent retention of beginning teachers.
15	Huling-Austin, L. (1998). Research on learning to teach (Huling-Austin, 1998)	Learning to Teach Design of induction and mentoring	INDUCTION PROGRAM MENTORING	<ul style="list-style-type: none"> • learning to teach has implications for the design of induction and mentoring programs • Giving beginning teachers difficult teaching assignments (multiple preparations, subjects out of their field, or demanding extracurricular assignments) is not only stressful for them but impedes the process of learning to teach • to survive the shock of classroom reality, novice teachers need collegial support from experienced teachers and peers • in addition to training in how to provide support, mentor teachers can benefit from learning about cognitive theory and how to integrate subject matter into discussions with novice teachers • beginning teachers should be evaluated differently than experienced teachers because learning to teach is a highly complex process that takes time to master.
16	Ingersoll, R. M. (2003). The teacher shortage: Myth or reality? (Ingersoll, 2003)	Summarizes a series of analyses that have investigated the possibility that there are other factors tied to the organizational	Report TEACHER ATTRITION DATA	<ul style="list-style-type: none"> • One strategy suggested by departed teachers to aid retention is increasing salaries, which are, not surprisingly, strongly linked to teacher turnover rates. Reduction of student discipline problems is a second factor frequently suggested by departed teachers. One of the factors tied to both student discipline and teacher turnover is how much decision making influence teachers themselves have over school policies that affect their jobs, especially those concerned with student behavioral rules and sanctions. • the data indicate that school staffing problems are primarily due to a “revolving door”—where large numbers of qualified teachers depart their jobs for reasons other than retirement.

		characteristics and conditions of schools that are behind school staffing problems		<ul style="list-style-type: none"> the amount of turnover accounted for by retirement is relatively minor when compared to that associated with other factors, such as teacher job dissatisfaction and teachers pursuing other jobs teacher recruitment programs, traditionally dominant in the policy realm, will not solve the staffing problems of such schools if they do not also address the organizational sources of low teacher retention. demand for new teachers and subsequent staffing difficulties are not primarily due to student enrollment and teacher retirement increases, as widely believed, but these are largely due to teacher turnover teachers moving from or leaving their teaching jobs—and most of this turnover has little to do with a graying workforce. <p>the data suggest that school staffing problems are rooted in the way schools are organized and the way the teaching occupation is treated and that lasting improvements in the quality and quantity of the teaching workforce will require improvements in the quality of the teaching job.</p>
17	<p>Ingersoll, R. M., & Smith, T. M. (2004).</p> <p>What Are the Effects of Induction and Mentoring on Beginning Teacher Turnover?</p> <p>(Ingersoll & Smith, 2004)</p>	To address the need for empirical evaluation of the effects of induction on beginning teacher turnover	<p>Empirical research</p> <p>Data from Schools and Staffing Survey (SASS), through National Center for Education Statistics (NCES)</p> <p><i>KEYWORDS:</i> attrition, beginning teachers, induction, mentorship, retention, turnover.</p> <p>HISTORICAL DATA</p> <p>TEACHER ATTRITION DATA</p>	<ul style="list-style-type: none"> participation in induction programs increased during the decade from 1990 to 2000. In 1990 participation was at about 4 and 10. By the 1999–2000 school year, participation rates in induction programs rose to about 8 in 10. the data clearly demonstrate that induction and mentorship have expanded from a common to a widespread practice for newcomers in the teaching occupation About two-thirds of beginning teachers said that they worked closely with a mentor The vast majority of mentees (nearly 9 in 10) found their mentors helpful. 68% of beginning teachers said that they had common planning time with other teachers in the same subject area or that they had participated in regularly scheduled collaboration with other teachers on issues of instruction. fewer beginning teachers reported receiving additional assistance to help ease their transition such as a reduced teaching schedule, a reduced number of preparations, or extra classroom assistance 29% of first-time teachers in 1999–2000 either changed schools at the end of the year (15%) or left teaching altogether (14%) Beginning public school teachers in high-poverty schools were less likely than their counterparts in medium-poverty schools to move (13% as opposed to 19%) but were more likely to leave teaching (16% as opposed to 9%). Teachers whose main assignment field was special education were far more likely than other teachers to move or leave teaching. odds that a special education teacher would leave were about 2 1/2 times higher than for other teachers sector and school poverty level were among the strongest predictors of likelihood of leaving as opposed to staying. School-level poverty concentration was also associated with an increased risk of beginning teachers' leaving at the end of their first year Having a mentor in one's field reduced the risk of leaving at the end of the first year by about 30%

				teachers participating in combinations or packages of mentoring and group induction activities were less likely to migrate to other schools or to leave teaching at the end of their first year.
18	Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers (Ingersoll & Strong, 2011)	Review of 15 empirical studies on effects of support, guidance, and orientation	Effects of NEW TEACHER INDUCTION	<ul style="list-style-type: none"> • Support and assistance for beginning teachers have a positive impact on three sets of outcomes: teacher commitment and retention, teacher classroom instructional practices, and student achievement • the studies on commitment and retention, most showed that beginning teachers who participated in induction showed positive impacts. • classroom instructional practices, the majority of studies reviewed showed that beginning teachers who participated in some kind of induction performed better at various aspects of teaching, such as keeping students on task, using effective student questioning practices, adjusting classroom activities to meet students’ interests, maintaining a positive classroom atmosphere, and demonstrating successful classroom management. • student achievement, almost all of the studies showed that students of beginning teachers who participated in induction had higher scores, or gains, on academic achievement tests. • exceptions to this overall pattern—in particular a large randomized controlled trial of induction in a sample of large, urban, low-income schools
19	Joint Legislative Audit and Review Commission. (2022). Pandemic Impact on Public K–12 Education (JLARC, 2022)	Impact of the COVID-19 pandemic on the state’s K–12 education system.	Report TEACHER SHORTAGE INCREASE NUMBERS OR PROVISIONALLY LICENSED TEACHERS	<ul style="list-style-type: none"> • Pandemic exacerbated teacher recruitment and retention challenges, which have persisted • Increasing gap between teachers leaving and entering the profession is leading to higher vacancy rates • About 67 percent of those leaving the plan did not retire, but left for other reasons (such as to change careers or take a temporary break in employment), more than the 58 percent average prior to the pandemic • 25 percent increase; The number of teacher vacancies more than doubled in 68 divisions • Virginia is relying more on teachers who are not fully qualified • a high quality teacher is typically fully licensed, has experience, is teaching in a field in which they are fully licensed, and in many cases has an advanced degree • More Virginia teachers are provisionally licensed and teaching outside their field than before the pandemic
20	Kamrath, B., & Bradford, K. (2020). A Case Study of Teacher Turnover and Retention in an Urban	The purpose of this study was to examine the characteristics, factors, and	a mixed-methods case study Data from short-term and long term educators	<ul style="list-style-type: none"> • many times as beginning teachers gain experience and begin to show improvement, they move on to less challenging schools or decide to leave the profession, thus contributing to the perpetual cycle of hiring inexperienced, and often ineffective, educators in urban schools.

	Elementary School (Kamrath & Bradford, 2020)	perceptions that contribute to both teacher turnover and teacher retention in a high-poverty urban elementary school.	REASONS FOR TEACHER ATTRITION	<ul style="list-style-type: none"> ● Administrator support for new teachers is critical; inadequate support from the administrator contributed to their decision to leave, and over half of the respondents indicated that increased administrator support might have influenced them to change their minds ● Administration support must include encouragement, assistance, and backing of teachers, especially when it comes to student discipline. ● Teacher recognition matters, even more than money. Teachers who are giving their all to educate children in challenging environments want to be acknowledged for their hard work. ● Rather, by the administration, and possibly the parents, adding meaningful teacher recognition into the school, the chances of retaining teachers go up. ● Relationships are key. Positive relationships between students and staff must continue to be fostered; teachers tend to stay because they feel a connection to their students ● “Lack of shared leadership” as a moderate or major factor in their decision to leave the school. <p>continual improvement on the relationship between admin and the faculty should be a focus.</p>
21	Kang, S. (2011). Understanding the Impacts of Mentoring on Beginning Teacher Turnover (Kang, 2011)	<p>The purpose of this study is to examine the relationship of mentoring programs to teacher retention</p> <p>This study is distinctive in terms of its use of two unique ways of analysis.</p> <p>Only includes teachers whose turnover reason was voluntary and avoidable</p>	<p>Quantitative</p> <p><u>Keywords:</u> beginning teachers, mentoring, turnover, retention, SASS, quantitative research</p>	<ul style="list-style-type: none"> ● First, turnover teachers in this analysis include new teachers who leave the profession and those who move to another school after the first year of teaching whether they move schools within the same division or not. ● The mentoring data revealed that more than 60% of all beginning teachers participated in mentoring programs ● Understanding impacts of mentoring on beginning teacher turnover ● mentoring for elementary beginning teachers (K-8th) did not show statistically significant influence on turnover whether beginning teachers have mentors from same or different subject and whether they received extensive or little assistance ● First, secondary beginning teachers who had mentors from different subjects and received little help showed major increase in the likelihood of moving by 970% ● Secondary teachers who had a mentor from a different subject and received little help from the mentor show major increase in the likelihood of moving and leaving the profession. major increase in the likelihood of both moving to another school and leaving the profession. <p>mentoring subgroups did not show any positive or negative influences on teacher turnover</p>

22	<p>Kutsyuruba, B., Godden, L., & Tregunna, L. (2013).</p> <p>Early-career teacher attrition and retention: A pan-Canadian document analysis study of teacher induction and mentorship programs</p> <p>(Kutsyuruba et al., 2014)</p>	<p>Analysis study that examined:</p> <p>(a) the organization and mandates of teacher induction programs (b) the role of mentorship as an aspect of teacher induction programs (c) the mandated roles, duties, and responsibilities of school administrators in teacher induction and mentorship processes</p>	<p>Document Analysis: Qualitative</p> <p><i>Keywords:</i> Early-career attrition; teacher retention; teacher induction; mentorship; Canada; principal</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p> <p>ROLE OF ADMIN IN SUPPORTING MENTORING PROGRAMS</p>	<ul style="list-style-type: none"> ● teachers abandon the profession in their first two to five years, feeling depressed and discouraged. ● Evidence of mentoring and induction support for beginning teachers was found at four different levels ● Composition of programs varied despite classification of provision ● Evidence of three different types of provision to support beginning teachers were found: Induction and mentoring support, Teacher induction support only, Mentoring support only. ● School administrator role was inconsistently identified across all locations. ● However, tensions often arise between the principal's responsibility to foster growth-oriented professional development for new teachers and the administrative or evaluative capacity (Cherubini, 2010). ● the first three to four years after initial training are the most crucial for a teachers' decision whether to remain in the profession or not (Jones, 2003). ● Retention of beginning teachers through provision of workshops, social events, and training <p>Despite recognition of the value of mentoring relationships for new and beginning teachers, mentoring was not always included within programs of support for new and beginning teachers. The role of a leader is seen to be crucial in supporting the implementation of a mentoring culture within an organization</p>
23	<p>LoCascio, S. J., Smeaton, P. S., & Waters, F. H. (2016).</p> <p>How Induction Programs Affect the Decision of Alternate Route Urban Teachers to Remain Teaching</p> <p>(LoCascio et al., 2016)</p>	<p>analyzes the induction programs for alternate route beginning teachers in low socioeconomic, urban schools</p>	<p>mixed-methods study</p> <p><i>Keywords</i> induction, mentoring, alternate route, beginning teachers, teacher retention</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p> <p>DATA IN OPPOSITION</p>	<ul style="list-style-type: none"> ● inconsistent implementation of the support structures did not impact teacher attrition ● evidence suggest that teachers are remaining teaching due to a variety of intrinsic and extrinsic factors, such as the struggling economy and strong self-efficacy beliefs ● The mentoring experience did not mitigate the obstacles of the first year to the degree that the beginning teachers were able to describe teaching as enjoyable or rewarding ● Novice teachers found trust, confidentiality, mentor accessibility, mentor responsiveness, and comfort level with their mentor to be important components in an effective mentoring experience ● frequent contact in the initial days and an accurate knowledge base regarding the policy and procedures of the school and effective teaching make a positive difference. ● Administrators need to consistently monitor the activities of the mentors and mentees, be an active presence during the induction program, and provide logistical support for activities, such as co-teaching that might need principal intervention and support to occur. <p>the decision to stay in teaching for this population is not as affected by the initial induction experience and mentoring as by personal characteristics and contextual variables</p> <p><u>Implications</u> divisions and administrators could develop a profile to use when selecting mentors and</p>

				provide training and guidelines for the mentor teachers to ensure that these characteristics are in place Having the knowledge of what works and what does not is important for the creation, implementation, and evaluation of new teacher induction programs
24	Long, J.S., McKenzie-Robblee, S., Schaefer, L., Steeves, P., Wnuk, S., Pinnegar, E., & Clandinin, D.J. (2012) Literature review on induction and mentoring related to early career teacher attrition and retention (Long et al., 2012)	importance of hiring and keeping the most effective teachers how teacher retention affects student achievement in both good and bad ways why teachers leave, ways to identify teachers who will be effective, and how to keep the best teachers in the classroom.	Article PRACTICES THAT INCREASE RETENTION TEACHER ATTRITION DATA	<ul style="list-style-type: none"> ● students' test scores were lower by 7.4% to 9.6% of a standard deviation in math when substantial teacher turnover occurred and 6% to 8.3% in ELA ● High-poverty schools, schools with higher crime rates, or poor leadership could influence both higher teacher turnover and lower student achievement ● teacher turnover is a problem in schools, especially in high-poverty schools ● They left for personal reasons such as pregnancy and caring for their children and because of health-related and personal family issues as well. ● successful schools had better retention, and less-successful schools had worse retention ● quality teachers exhibited a willingness to put in the time needed to prepare for class, work with students and even meet with them outside of class time, talk with parents, serve on committees, and attend school meetings. Quality teachers also showed a love for the age group they taught, which possibly made them better able to relate to their students. ● Retaining Effective Teachers: provide quality professional development, support of an induction program for new teachers, assigning mentors, keeping grade-level teams together, providing shared leadership to teachers, increased teacher salaries, and positive work environments.
25	Maready, B., Cheng, Q., & Bunch, D. (2021). Exploring mentoring practices contributing to new teacher retention: An analysis of the beginning teacher longitudinal study (Maready et al., 2021)	Identified both predictive and non-predictive mentoring practices for new teacher retention Designing effective induction programs to better increase new teacher retention	Secondary analysis of the beginning teacher longitudinal study (BTLS), USDOE MENTORING PROGRAMS: NEED AND DESIGN PRACTICES THAT INCREASE RETENTION	<ul style="list-style-type: none"> ● Fourteen out of the twenty-three mentoring practices were able to predict new teachers staying in the initial teaching assignment a second year. ● Having a mentor assigned in the first year whose main job is to mentor and who taught the same subject frequency of supports in subject and grade level instruction, and ten others all predicted new teachers' retention in the same school for their second year of teaching ● These seven practices are overall improvement due to mentor supports, having a mentor whose main job is to mentor, frequency of supports in subject and grade level instruction, frequency of supports in student assessment and data, support improved using instructional technology, support improved selecting and adapting curriculum and support improved interacting with parents. ● majority of the twenty-three mentoring practices are able to predict new teachers' retention either into their second year or fifth year of teaching

				<ul style="list-style-type: none"> ● positive correlation between teacher induction support and new teacher retention (Henke, Chen, & Geis, 2000; Kelly, 2004; Parker, 2010; Resta et al., 2013; Ronfeldt & McQueen, 2017; Smith & Ingersoll, 2004) ● The frequency of support in subject matter or grade level instruction, classroom management and discipline, using instructional technology, developing, and interpreting student assessments, and selecting and adapting curriculum and instructional materials are all predictive of new teacher decisions to remain in the initial teaching assignment. ● results from this study corroborate previous research
26	Mullen, C. A., & Fallen, M. S. (2022). "Navigating uncharted waters": New teacher mentoring and induction. (Mullen & Fallen, 2022)	<p>Qualitative Case Study</p> <p>Practitioners' perceptions of mentoring in crisis contexts is a gap in elementary school studies</p>	<p>Teacher Attrition Impact of COVID 19</p> <p>SCHOOL LEADERS ROLE IN INDUCTION/MENTORING</p>	<ul style="list-style-type: none"> ● support, accessibility, and collaboration (SAC) are important components of formal mentoring/induction. ● Mentoring programs suffered during the pandemic; During COVID-19, some US school divisions relied on mentoring at a distance ● mentoring inequities in schools have been reported when matches are unsuitable or novices are not being observed by their mentors or discussing core instructional activities ● Teacher stress, particularly during a pandemic, undermines well-being and performance ● Mentors and leaders who monitor new teacher stress signaled by negative effects and other behaviors can address productive strategies (e.g., coping skills, goal-setting, meditation) for managing stress through mentoring/induction programs and relationships. ● Managing the classroom and student behavior can seem overwhelming; not feeling prepared to deal with the realities of teaching can lead to despair and attrition ● this is the often the first person novices meet and form a relationship with. Principals should not simply default to mentoring services but rather play an active role
27	Mullen, C. A., Fitzhugh, G. II, & Hobson, A. J. (2022). District-wide mentoring: Using Kram's model to support educators (Mullen et al., 2022)		Implementing Kram's mentoring models in a district wide induction program	<ul style="list-style-type: none"> ● Successful mentorships are themselves developmental and progressive, consisting of distinct phases; relationships develop and mature over time, they build capacity for people, programs, and organizations ● mentoring novices with deliberation and skill was important to this leader ● "partnership beginning to form beyond the defined roles of mentor and mentee." The veteran teachers and staff also should be growing in this phase ● administrators need to give the cohort attention, understanding that building trust during a crisis and in a remote space takes more time than in a traditional setting. ● When fully implemented, all novice educators will experience mentoring in phases by effective mentors

28	Mullen, C. A., & Flanagan, A. G. (2023). Teacher psychological capital and leadership responsibility for developing staff in the Great Resignation.	Lit review teacher psychological capital (PsyCap) and leadership responsibility for developing staff	<p>SCHOOL LEADERS IMPACT ON NEW TEACHERS</p> <p>psychological capital (PsyCap)</p>	<ul style="list-style-type: none"> ● Building leaders' support for maintaining a healthy environment and retaining a quality workforce can be bolstered with knowledge of teacher PsyCap and its relationship to satisfaction and happiness. ● Advancing education as a focus of study in positive psychology, the authors studied teachers' and leaders' conceptions of PsyCap, satisfaction, and happiness from a solution-generating approach. ● The role of leadership in investing in teacher psychology relative to hope, efficacy, resilience, and optimism (HERO) is highlighted. ● Leaders' awareness of these qualities and how to foster them in order to both influence and manage positive attitudes and behaviors at work warrant deliberation on behalf of all staff, including SCTs.
29	Mullen, C. A., Shields, L. B., & Tienken, C. H. (2021). Developing teacher resilience and resilient school cultures. (Mullen et al., 2021)			<ul style="list-style-type: none"> ● Teacher resilience in a pandemic is a timely topic for America's superintendents. ● teacher resilience and retention, with relevance for building resilient school cultures. ● individual and contextual factors of resilience impact teachers' ability to persevere, as well as schools' capacity to retain novice teachers. ● Resilience is associated with retention, job satisfaction, and other positive outcomes. ● Actions for developing teacher resilience and resilient school cultures are identified. ● K–12 teachers who attend to factors of resilience can better adapt and overcome adversity. ● School district leaders who encourage teacher resilience can foster resilient school cultures. <p>Mansfield et al. (2012) identified 4 dimensions of resilience:</p> <ul style="list-style-type: none"> • Professional factors: committed students, organization and preparation, effective teaching skills, adaptability, reflection; • Social factors: strong interpersonal and communication skills, problem-solving, developing support and relationships, seeking help; • Motivational factors: optimism, persistence, focus on improvement, self-efficacy, setting realistic goals and expectations, maintaining motivation and enthusiasm, enjoying challenges; • Emotional factors: sense of humor, not taking things personally, regulating emotion, bouncing back from challenges, coping skills, caring for one's own well-being
30	Muñoz, M. A., Scoskie, J. R., & French, D. L. (2013). Investigating the "black box" of effective teaching:	the relationship between attributes of effective teaching, as perceived by both more and	Quantitative, Hierarchical Linear Modeling Keywords Teacher effectiveness . Teacher	<ul style="list-style-type: none"> ● identify more and less effective teachers by measuring reading achievement ● The classroom level predictor results indicated a significant difference among the two groups of teachers identified as more effective and less effective. ● effective teachers focus on meeting students' basic physical and emotional needs understanding that if these are not met the students' brains are not likely to engage in cognitive thinking

	<p>the relationship between teachers' perception and student achievement in a large urban division</p> <p>(Muñoz et al., 2013)</p>	<p>less effective teachers, and fourth grade reading achievement results of their students.</p>	<p>quality . Value-added assessment . Classroom management . Instructional practices . Student achievement</p> <p>AFFECTS ON STUDENT ACHEIVEMENT</p> <p>NOVICE TEACHER CHALLENGES</p>	<ul style="list-style-type: none"> ● less effective teachers place a greater value on limiting interruptions and focuses classroom time on teaching and learning perhaps to the detriment of recognizing the importance of addressing basic needs ● by focusing on teacher effectiveness, teacher pre-service programs may strengthen teacher's pedagogical skills on building positive relationships with students. ● School improvement efforts cannot focus on teacher prerequisites alone to improve student outcomes. ● Research indicates teachers' education and experience affect student achievement, but the effectiveness of experience levels off after 5 years ● longitudinal studies along with other measures such as teacher observations to determine teacher effectiveness for evaluation purposes
31	<p>Richter, D., Kunter, M., Lüdtke, O., Klusmann, U., Anders, Y., & Baumert, J. (2013). How different mentoring approaches affect beginning teachers' development in the first years of practice, (Richter et al., 2013)</p>	<p>Summarizes the results and conclusions that sought to identify the essential elements of teacher induction programs,</p>	<p>qualitative meta-analysis</p> <p><i>Keywords</i> Induction, Motivation, Novice Teachers</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p> <p>DATA IN OPPOSITION</p>	<ul style="list-style-type: none"> ● Mentoring and collaborative planning may support teacher retention ● Smith and Ingersoll (2004) report that teachers with mentors in their field had 30% higher retention rates (p. 702). ● Collaborative planning time also helped to retain teachers. ● comprehensive induction programs may not be as effective as is generally believed by practitioners of school leadership. ● studies are not yet able to inform educational leaders about the optimal length of time induction programs should run to increase teacher retention rates ● Comprehensive induction programs vary in composition as well and may include; mentoring, coursework, workshops, seminars, collaboration, networking, and supportive communication from the administration
32	<p>Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How Teacher Turnover Harms Student Achievement (Ronfeldt et al., 2013)</p>	<p>the causal effect of teacher turnover on student achievement</p> <p>establishing evidence for a direct effect of turnover on student achievement</p>	<p>Quantitative</p> <p>Study focused on extensive administrative data from the New York City Department of Education and the New York State Education Department.</p> <p>KEYWORDS: student</p>	<ul style="list-style-type: none"> ● Nationally, about 30% of new teachers leave the profession within 5 years, and the turnover rate is about 50% higher in high-poverty schools as compared to more affluent ones ● teacher turnover has a significant and negative impact on student achievement in both math and ELA. ● teacher turnover is particularly harmful to the achievement of students in schools with large populations of low-performing and Black students. ● if the teachers who leave a school are worse than those who replace them, then turnover is assumed to have a net positive effect. ● turnover has a harmful effect on student achievement, even after controlling for different indicators of teacher quality, especially in lower performing schools.

		explore possible mechanisms to account for the observed effect.	achievement, teacher turnover, retention AFFECTS ON STUDENT ACHIEVEMENT	<ul style="list-style-type: none"> ● does not identify the specific mechanism by which turnover harms students, it provides guidance on where to look. ● schools would benefit from policies aimed at keeping grade-level teams intact over time ● introduce incentive structures to retain teachers that might leave otherwise. Implementing such policies may be especially important in schools with large populations of low-performing and Black students, where turnover has the strongest negative effect on student achievement.
33	Rose, A. L., & Sughrue, J. A. (2021). Professional development needs of novice alternatively certified teachers in Florida: Teachers' perspectives (Rose & Sughrue, 2021)		ALTERNATIVE CERTIFICATION	<ul style="list-style-type: none"> ● novice alternatively certified teachers' (ACT) perspectives on school leaders' knowledge of the developmental supports necessary for their classroom success ● Novice ACTs perceived their school leaders had limited knowledge regarding alternative certification requirements and preparation, and they identified some efforts of their school leaders to provide professional development. ● Opportunities were impactful when they were relevant to specific teacher challenges. ● Alternative certified teachers success is contingent upon appropriately implemented supports ● intended supports provided by school personnel may be adequate in intention, in reality, they are inconsistent and not executed as planned ● take the initiative to find development opportunities that met their individual needs demonstrates a lack of meaningful development opportunities that were readily available to these teachers, either by their school leaders or by the district
34	Schatz-Oppenheimer, O. (2017). Being a mentor: novice teachers' mentors' conceptions of mentoring prior to training (Schatz-Oppenheimer, 2017)	novice teachers' mentors' conceptions of mentoring prior to their mentoring training.	MENTORING PRACTICES	<ul style="list-style-type: none"> ● forming interpersonal ties, providing emotional support, and providing professional support. ● perceived as an expert in professional knowledge who helps the so-far-uninformed novice teacher a "teacher-student" type of relationship ● building mutual trust is considered important ● teacher mentors are unaware of the complexity of their prospective job. ● New teacher mentors do not understand that emotional support based on interpersonal relations, the very core of mentoring, is a personal quality that is not easy to acquire through learning and takes time ● unaware of the conflicts inherent in mentoring that render the job so complex like inherent contradiction between supporting the novice teacher and evaluating his/her job performance ● Mentors' training courses need to emphasize conflict management between teachers and parents or educational staff members, as well as among children ● mentors' inability to distinguish between behavior toward the children who are their students and the adult novice teachers they expect to mentor ● Mentoring focuses on observing novice teachers, analyzing their classroom performance, and evaluating their competence for the teaching profession

35	<p>See, B. H., & Gorard, S. (2020).</p> <p>Why don't we have enough teachers?: A reconsideration of the available evidence.</p> <p>(See & Gorard, 2020)</p>	<p>Research on induction, coaching, mentoring and other types of support appears to focus on how school systems, site based administrators and veteran teachers can offer support to beginning teachers.</p>	<p>Report</p> <p><i>Keywords:</i> new teachers, teacher induction, urban high school</p> <p>HISTORICAL DATA</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p>	<ul style="list-style-type: none"> ● authentic and meaningful support in place that promotes the teachers' growth and development. ● mentors act as role models that encourage, counsel and support new teachers. ● In the early 1980s, teacher mentoring programs developed in an attempt to reduce the rate of teacher attrition among beginning teachers. The intention was to offer new teachers an effective transition into the world of teaching, instruct mentors in the most effective methods of support of novice teachers, and develop the teaching profession ● the culture of urban schools differs somewhat from that of suburban schools. Therefore, the manner in which novice teachers conduct themselves in terms of their disposition, beliefs, and acquisition of knowledge is likely to be heavily influenced by factors that are distinctive to the urban school setting ● mentors of teachers in an urban setting may have a very different role to play when compared to the mentors serving teachers in a primarily middle-class setting. role of the administration in the mentoring process of novice teachers should be a passive one and that the teacher mentor should play the predominant role
36	<p>Spooner-Lane, R. (2017).</p> <p>Mentoring beginning teachers in primary schools: Research review</p> <p>(Spooner-Lane, 2017)</p>	<p>Lack of research delineating the key components of effective mentoring programs in primary education.</p>	<p>integrative literature research review empirical studies conducted since 2000</p> <p>Keywords: teacher induction; mentoring; beginning teachers; primary schools; elementary schools; integrative review</p> <p>MENTORING PROGRAMS</p>	<ul style="list-style-type: none"> ● need for research studies to provide a clear definition of mentoring and how it may be distinguished from induction so that the impact of mentoring can be disentangled from that of induction. ● Mentoring extends beyond the induction program and involves two major overlapping stages. First, a respectful, trusting relationship is established between the experienced teacher and the beginning teacher. ● Second, the mentor through collaborative, reflective conversations assists the beginning teacher to establish clear professional development goals and progress towards becoming an effective teacher. ● variation across studies was the differences in the processes by which mentors were assigned to beginning teachers in their first year of teaching, beginning teachers considered that on-site mentors who were available to provide immediate support were viewed as more valuable than mentors who were off-site and visited infrequently ● Increased attention to the processes of pairing mentors and mentees is warranted, as well as recognizing that teaching release for the mentor increases effectiveness. ● Mentoring program that offer beginning teachers only emotional support without challenging them to reflect and reframe their teaching beliefs and practices are not likely to enhance the quality of teaching or student learning outcomes
37	<p>Stanulis, R. N., Little, S., & Wibbens, E. (2012).</p>	<p>Targeted mentoring, instructional quality, and</p>	<p>Qualitative & Quantitative research</p>	<ul style="list-style-type: none"> ● mentoring has been linked to the retention of teachers, increases in job satisfaction, diversified pedagogical strategy use, and greater student learning in a review of international research on mentoring ● Generic mentoring was not found to make a difference in changing practice;

	Intensive mentoring that contributes to change in beginning elementary teachers' learning to lead classroom discussions (Stanulis et al., 2012)	effective professional development.	<i>Keywords:</i> Teacher induction Mentoring Teacher education MENTOR QUALITIES/TRAINING	<ul style="list-style-type: none"> ● generic professional development has not been found to make a difference either. ● Since novice teachers are just beginning to learn to teach, a certain kind of professional development is necessary in order to help them become effective teachers early in their career. ● mentors' primary job responsibility was the development and support of beginning teacher learning in their assigned schools ● mentors focus their weekly interactions with beginning teachers on building classroom communities that were conducive to leading text-based discussions ● did teach differently post-intervention when compared to a similar group of teachers who did not receive our intervention
38	Stewart, T. T., & Jansky, T. A. (2022). Novice teachers and embracing struggle: Dialogue and reflection in professional development	Determine significant variables that contribute to teachers deciding to leave think about why they decided to continue teaching	Qualitative phenomenological inquiry NOVICE TEACHER CHALLENGES REASONS FOR LEAVING THE FIELD	<ul style="list-style-type: none"> ● literature reveals a multitude of significant variables that contribute to teachers deciding to leave the field or to leave their current teaching position for better employment opportunities ● lack of professional development, mentorship, and leadership were important factors that increased the likelihood that teachers would choose to leave the profession. ● importance of relationships teachers have with colleagues and students, social respect, and emotional respect effectiveness of administrative leadership and school environment as a significant factor related to teacher retention, particularly for less-experienced teachers ● the teachers appeared to have a passion for their career ● 10 factors contributed to longevity in the field ● trends in education are listed as issues that are outside the control of the teacher. ● 6 issues listed as reasons for leaving the field
39	Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. (Sutcher et al., 2016)	Report on teacher shortages and nationwide trends	Teacher Supply and Demand TEACHER SHORTAGE Using teacher Residency models	<ul style="list-style-type: none"> ● the term teacher shortage is used to refer to an insufficient production of new teachers, given the size of student enrollments and teacher retirements. ● a large body of research indicates that teacher staffing problems are driven by a myriad of factors, including not only production of new teachers in various fields, but also teacher turnover, changes in educational programs and pupil-teacher ratios, and the attractiveness of teaching generally and in specific locations. ● difficulty employers have in filling vacancies. ● Across the country, teachers working on emergency credentials (the least qualified of the underprepared teachers), were three times more likely to serve in a high-poverty, high-minority school than in a low-poverty, low-minority school (4.0% vs. 1.4%). ● Unless major changes in teacher supply or a reduction in demand for additional teachers occur over the coming years, annual teacher shortages could increase to as much as 112,000 teachers by 2018
40	Sutcher, L., Darling-Hammond, L., &	Sources and solutions for	TEACHER SHORTAGE	<ul style="list-style-type: none"> ● Imbalance between demand and presenting supply

	<p>Carver-Thomas, D. (2019).</p> <p>Understanding teacher shortages: An analysis of teacher supply and demand in the United States</p> <p>(Sutcher et al., 2019)</p>	<p>teachers shortages in the US</p>		<ul style="list-style-type: none"> ● In 2016 or 2017, a total of at least 87,000 positions were filled by teachers who were not fully certified; , the national total of uncertified teachers would be approximately 109,000 ● Civil Rights Data Collection (CRDC), a universal survey of all public schools and districts, provides a more comprehensive overview of the distribution of teachers who lack certification ● top quartile of minority student enrollment had nearly four times as many uncertified teachers as schools in the bottom quartile of minority student enrollment. ● more than 20% of the teachers in high-minority schools were uncertified ● While policymakers often focus on how to recruit more teachers when there are shortages, our findings suggest it is equally important to recognize policies that decrease teacher attrition
41	<p>Taie, S., & Lewis, L. (2023).</p> <p>Teacher Attrition and Mobility. Results From the 2021–22 Teacher Follow-up Survey to the National Teacher and Principal Survey (NCES 2024-039).</p> <p>(Taie & Lewis, 2023).</p>	<p>Report</p> <p>Follow up from current and former teachers survey 21-22 Teacher Follow up Survey</p>	<p>Statistics in</p> <p>TEACHER ATTRITION</p>	<ul style="list-style-type: none"> ● Among public school teachers who were teaching during the 2020–21 school year, 84 percent remained at the same school during the 2021–22 school year; 8 percent moved to a different school (“movers”), and 8 percent left the teaching profession (“leavers”). ● 80 percent remained at the same school ● Among public school teachers who were teaching at schools where 75 percent or more of K–12 students were approved for free or reduced-price lunch in the 2020–21 school year, 82 percent remained at the same school during the 2021–22 school year, 9 percent moved to another school, and 9 percent left teaching ● , 51 percent moved to another public school in the same district, 46 percent moved to a public school in another public school district ● 20 percent indicated that their most important reason for moving was because they wanted a job that was more conveniently located or because they had moved, 10 percent indicated that their most important reason was because they wanted the opportunity to teach at their current school, and 9 percent indicated that their most important reason for moving was because they wanted or needed a higher salary
42	<p>Walker, K., & Kutsyuruba, B. (2019).</p> <p>The Role of School Administrators in Providing Early Career Teachers’ Support: A Pan-Canadian Perspective</p>	<p>discusses results that pertain to the mandated roles, duties, and expectations of school administrators and early career teachers’ perceptions of school</p>	<p>Mixed methods research</p> <p><i>Keywords:</i> Early career teachers; Pan-Canadian; School administrator; Teacher induction; Teacher retention</p> <p>ROLE OF ADMIN IN</p>	<ul style="list-style-type: none"> ● Scholars have found that administrators’ commitment to mentoring programs for new teachers either supports and promotes the retention of novice teachers or undermines the success of induction and results in teacher attrition ● The administrators in various jurisdictions were mandated to be responsible for mentor selection and mentor-protégé matching, for providing adequate professional development opportunities and release time for beginning teachers, for overseeing the mentorship process, for monitoring the progress of beginning teachers, and most importantly, for being mentoring role models in their everyday activities in schools ● administrators are accountable for providing release time for the mentoring pairs and for arranging necessary training. Emphasis is placed upon administrators to create a culture of mentoring in their schools through the careful matching of mentor and

	<p>(Walker & Kutsyuruba, 2019)</p>	<p>administrators' engagement in the teacher induction and mentoring processes</p>	<p>SUPPORTING MENTORING PROGRAMS</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p>	<p>protégé, offering support and encouragement for the mentoring process, intervening if the mentoring relationship is not working, and supporting team orientation to the community culture</p> <ul style="list-style-type: none"> ● school administrators have to ensure the mentorship is not associated with evaluation. 60 percent of the respondents agreed or strongly agreed that their school administrator shared leadership and promoted a collaborative culture in their school. ● administrators providing support, collaborating with beginning teachers, observing their teaching, and assisting them through the evaluation process. Administrators who demonstrated this desire were available to talk, checked in regularly, listened to beginning teachers' concerns, created favorable working conditions and generally care about them ● principal supported her growth by using the mentorship program, thus delegating mentorship tasks to another colleague. ● best mentorship support would come from a like-minded colleague with whom there were mutual values and trust. ● Positive and supportive administrators were credited with increasing the satisfaction, efficacy, confidence, and resilience of ECTs.
<p>43</p>	<p>Warsame, K., & Valles, J. (2018). An Analysis of Effective Support Structures for Novice Teachers (Warsame & Valles, 2018)</p>	<p>To evaluate the effectiveness of novice teacher induction support structures</p> <p>Perception of novice teachers regarding mentoring experiences at their certifying universities and employing school divisions</p>	<p>Sequential exploratory mixed methods design</p> <p>Quantitative through descriptive statistics, Qualitative semi structured interviews</p> <p><i>Keywords:</i> Novice teacher mentoring, induction support, professional development, classroom, university, school divisions</p> <p>ROLE OF ADMIN IN SUPPORTING MENTORING PROGRAMS</p> <p>MENTORING PROGRAMS: NEED AND DESIGN</p>	<ul style="list-style-type: none"> ● theory that beginning teachers require supportive and structured induction programs as they begin their careers ● Retaining new teachers through the use of effective support structures is a goal shared by many researchers, universities, and school districts ● Center for Research, Evaluation and Advancement of Teacher Education (CREATE) 1998 ● Induction programs provide newly-hired teachers an introduction to the culture of the hiring district and the hiring school by making the teacher feel welcomed into the school, the community, and with the staff and curriculum (Bland, Church, & Luo, 2014) ● Teachers reported that collaboration/talking with other teachers was the most helpful while staff development before the start of the school year was least helpful ● agreed that the administration support for their professional growth and classroom mentors were helpful ● one-third of the teachers responding also felt that the classroom visits or evaluations from administrators and professional development during the school year were beneficial ● teachers still teaching had positive things to say about their school-based support, teachers who left the profession had negative experiences with school-based support ● (a) strong school-based support can potentially compensate for the lack of university-based support, and (b) strong university-based support cannot compensate for the lack of school-based support for a novice teacher.

				<ul style="list-style-type: none"> ● strive to increase administrative, classroom mentoring, and professional development support for first-year teachers in order to increase first-year teacher retention.
44	<p>Whalen, C., Majocho, E., & Van Nuland, S. (2019).</p> <p>Novice teacher challenges and promoting novice teacher retention in Canada</p> <p>(Whalen et al., 2019)</p>	<p>Being a novice teacher and how policies on mentorship influence/shape teacher retention/attrition</p>	<p>Phenomenological study</p> <p>KEYWORDS New teacher retention; mentoring; teaching challenges; new teacher induction</p> <p>NOVICE TEACHER CHALLENGES</p>	<ul style="list-style-type: none"> ● Teacher attrition rates still grow despite mentoring ● Novice teachers experience high rates of discouragement and depression ● Links to student achievement and improved instruction ● Highly regarded mentoring skills: coaching and modeling of instructional techniques; ● The following list of skills is a snapshot of the areas for growth and development through reducing stress, improving lesson planning, classroom management, performing required administrative tasks, and other characteristics that ultimately will improve student progress (Ingersoll and Strong 2011; Sowell 2017). ● Novice teacher retention higher in highly collaborative school cultures.
45	<p>Wilhelm, A. G., Woods, D., & Kara, Y. (2021).</p> <p>Supporting change in novice alternative certification teachers' efficacy.</p> <p>(Wilhelm et al., 2021).</p>	<p>Report</p>	<p>INDUCTION PROGRAMS</p>	<ul style="list-style-type: none"> ● As of 2007, approximately 20% of public school teachers in the United States were alternatively certified (AC) ● importance of supporting new teachers over their first few years of teaching, mentoring, ● Other formal supports also have the potential to develop novice teachers including instructional coaching, school leader support, and collaborative teacher meetings. ● Mentors- what they should know and be able to do including providing both instructional and emotional (i.e., psychological) support, and build trusting relationships with novice teachers ● Principal instructional leadership is often described with three dimensions: vision setting, instructional management, and school climate promotion (Hallinger, 2005). With respect to the management of the instructional program, school leaders are often charged with supporting teachers both directly (e.g., observation and feedback) and indirectly (coordinating resources)
46	<p>Zweig, J., Lemieux, C., Shakman, K., O'Dwyer, L., & Schillaci, R. (2021).</p> <p>Teacher shortages in New York State: New teachers' certification pathways, certification areas, district of employment, and</p>	<p>Report on teacher shortages in NY</p>	<p>TEACHER SHORTAGES</p>	<ul style="list-style-type: none"> ● cross the country, educators and policymakers are concerned about teacher shortages, particularly in hard-to-staff subject areas and school district ● About 15 percent of new teachers earned certificates through the alternative in-state pathway ● Five percent of new teachers were uncertified ● The most frequent certification area for new teachers was the shortage certification area4 of special education, while the shortage certification areas of career and technical education and bilingual special education were among the least frequent ● About 24 percent of new teachers in New York City district schools and 15 percent of new teachers in charter schools earned certificates through the alternative in-state pathway

	retention in the same district (REL 2022–109). (Zweig et al., 2021)			<ul style="list-style-type: none">● The rate of retention in the same district was lowest for new teachers who earned certificates in the shortage area of career and technical education● New teachers employed in high-need districts had higher rates of retention in the same district than new teachers employed in average- and low-need districts
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Themes From Literature Review :

TEACHER SHORTAGES; TEACHER ATTRITION; TEACHER RETENSION

ROLE OF ADMIN IN SUPPORTING MENTORING PROGRAMS

MENTORING PROGRAMS: NEED AND DESIGN

ALTERNATIVE CERTIFICATION

AFFECTS ON STUDENT ACHEIVEMENT

Appendix B: CITI Certificate



Completion Date 11-Jan-2023
 Expiration Date 11-Jan-2026
 Record ID 53499619

This is to certify that:

Diana Rios

Has completed the following CITI Program course:

Not valid for renewal of
 certification through CME.

Social & Behavioral Research

(Curriculum Group)

Social & Behavioral Research

(Course Learner Group)

1 - Basic Course

(Stage)

Under requirements set by:

Virginia Polytechnic Institute & State University (Virginia Tech)

CITI
 Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w57639fd3-6e02-453d-8166-23c35cc03ef6-53499619

Appendix C: Email to Professional Organizations

Subject: Request for Distribution of Research Study Information

Dear (contact person for research at organization),

My name is Diana Rios and I am a doctoral candidate in the Virginia Tech Educational Leadership and Policy Studies program. I am currently searching for elementary leaders to participate in my dissertation research study. My study is being conducted through Virginia Tech, IRB (24-549) and is supervised by my dissertation chair, Dr. Carol A. Mullen. I am contacting you because your organization has a membership containing many school leaders that may be eligible to participate in my study.

The primary purpose of my study is to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers. The study will collect data from Virginia elementary school leaders on their experiences, recommendations on topics of focus, biggest successes and challenges, and strategies they perceive as important in supporting provisionally licensed teachers in their schools. I would also like to seek understanding of how elementary school leaders differentiate the implementation of induction strategies for their provisionally licensed teachers.

I am using a qualitative research design to collect rich narrative data from participants and build a deeper understanding of school leadership perceptions and strategies. I am actively recruiting elementary school leaders who have been supporting provisionally licensed teachers at their schools for at least one year as of the start of the 2023-2024 school year. Leaders may be principals, associate principals, or assistant principals. The qualitative design will consist of a 5-minute demographic survey, a 30-minute interview, and a content analysis of related documents provided by participants. The information provided by participants will be confidential and anonymous.

If you are willing to distribute information about my study, please use any avenues you deem appropriate to share the attached recruitment flyer. If you would like to discuss the research study further before proceeding, please do not hesitate to contact me by phone or e-mail. Thank you in advance for your time and consideration.

Respectfully,

Diana Rios
Doctoral Candidate, Virginia Tech

Appendix D: Research Study Recruitment Flyer

Recruitment Flyer for Distribution via Professional Organizations and Social Media

A recruitment flyer was shared with professional organizations and via the researcher's Facebook account. While the visual design of the flyer may be updated prior to distribution, the information below will remain the same.



WHAT: Participants are needed for a Virginia Tech Educational Leadership and Policy Studies doctoral research study (IRB # 24-549)

WHY: The purpose of the study is to explore elementary school leaders' perceptions and experiences with induction support for provisionally licensed teachers.

WHO: You may qualify for this research if you are a Virginia elementary school leader who has been supporting your school's provisionally licensed teachers with induction programming for at least one full school year. Induction programming may consist of mentoring, support of peer observations, instructional coaching, etc.

HOW: Eligible participants selected will participate in a 30-minute interview virtually via Zoom. Participants will also be invited to share relevant documents related to the research for content analysis. If you are interested, please fill out this survey (QuestionPro link) to be considered for inclusion.

FOR MORE INFORMATION: contact Diana Rios

Appendix E: Demographic Study

School Leadership Demographic Survey

Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally Licensed Teachers

The purpose of the qualitative study is to understand the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers. Completing this survey will help me review potential participants and build a diverse sample for inclusion. I will contact with you if you are selected to participate in interviews. Thank you for your time.

Please answer the following questions:

1. Consent information overview with a question asking if participants are willing to move forward in the study
 1. Agree
 2. Disagree
2. Name
3. E-mail address
4. School Building Level
 - a. Elementary
 - b. Middle
 - c. High School
 - d. Multi-level
5. Current position
 - a. Principal
 - b. Assistant Principal
 - c. Associate Principal
 - d. Other
6. Number of years in current role
 - a. 1-3
 - b. 4-6
 - c. 7-9
 - d. 10-12
 - e. 13-15
 - f. 15+
7. Gender
 - a. Female
 - b. Male
 - c. Non-binary
8. School size
 - a. <400 students
 - b. 400-800 students
 - c. 800+ students

9. School setting
 - a. Rural
 - b. Suburban
 - c. Urban
10. Current number of provisionally licensed teachers you support in your school
 - a. 1-2
 - b. 3-4
 - c. Between 5 and 10
 - d. 10+
11. Number of provisionally licensed teachers within the past 3 years (since 2020-2021 school year)
 - a. 1-3
 - b. 4-6
 - c. 7-9
 - d. 10-12
 - e. 13-15
 - f. 15+
12. How often do you provide support for the provisionally licensed teachers in your school?
 - a. Quarterly
 - b. One time per month
 - c. Every other week (2 x per month)
 - d. Weekly
13. Length of support sessions for provisionally licensed teachers
 - a. More than one hour
 - b. One hour
 - c. 45 minutes
 - d. 30 minutes
 - e. Less than 30 minutes
14. Does your school differentiate induction programming for provisionally licensed teachers?
 - a. Yes
 - b. No
 - c. Unsure

Appendix F: Potential Participant Email

Subject Line: Invitation to Participate in Research Study Interviews and Document Analysis

Dear Leader,

Hello! My name is Diana Rios, and I am a doctoral candidate in the Virginia Tech Educational Leadership and Policy Studies program under the supervision of my advisor and expert researcher Dr. Carol A. Mullen. Thank you for filling out the demographic survey that was shared out via professional organizations and the Facebook social media platform. I am sending this e-mail to let you know that you have been selected as a participant in the next stage of my study examining the perceptions and experiences of elementary school leaders in relation to the induction programming and support you are responsible for providing provisionally licensed teachers.

Below, you will find information about consenting to the study, a scheduling link to select a time that would work for you, and information about sharing relevant documents for inclusion in the study. Your input is voluntary, but greatly appreciated in developing authentic perceptions and strategies that other leaders may find beneficial for starting or sustaining teacher peer observation practices at their own schools. If you have any questions, please do not hesitate to contact me via phone or e-mail.

Consent information form link

Scheduling link

Document collection survey

Respectfully,

Diana Rios
Doctoral Candidate, Virginia Tech

Appendix G: Informed Consent Form for the Demographic Survey and Interview

Informed Consent Form for the Demographic Survey and Consent for the Interview

Title of research study: Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally Licensed Teachers

Principal Investigator: Dr. Carol A. Mullen, Ph.D.; College of Liberal Arts & Human Sciences, School of Education, Educational Leadership Program at Virginia Polytechnic Institute and State University

Other study contact(s): Diana Rios, Doctoral Candidate

Key Information: We invite you to participate in this research study because you have been identified as a Virginia elementary school leader who has been supporting provisionally licensed teachers at your school for at least one year. We received your information via your survey submission, or a colleague shared your name as a possible contact.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to Dr. Carol A. Mullen, Ph.D.; College of Liberal Arts & Human Sciences, School of Education, Educational Leadership Program at Virginia Polytechnic Institute and State University.

This research has been reviewed and approved by the Virginia Tech Institutional Review Board (IRB). You may communicate with them at 540-231-3732 or irb@vt.edu if:

- You have questions about your rights as a research subject.
- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team to provide feedback about this research.

How many people will be participating in this research study?

We plan to include 15 to 25 people in this research study.

What happens if I say yes, I want to be in this research?

- If you say yes to the research, you will be able to progress along and share your information in a demographic survey.
- Surveys will be reviewed to collect demographic data from the participants and to purposefully select the participants for interviews and to share relevant documents.

- The participants for the one-on-one interviews will be sent an electronic letter with a description of the purpose of the study, a request to participate, a scheduling link, and another copy of the consent information form.
- Data will be collected through scheduled one-on-one, 30-minute interviews with each interviewee and the researcher virtually via the Zoom online platform. The interviews will be recorded and transcribed through Zoom and the Voice Memos application.

What happens if I say yes, but I change my mind later?

You can leave the research at any time, for any reason, and it will not be held against you. If you decide to leave the research, any data collected prior to the withdrawal will be destroyed by the researcher. If you decide to leave the research, contact the investigator, Dr. Carol A. Mullen, so that the investigator can notify the researcher and the researcher can destroy any data collected prior to the withdrawal.

Is there any way being in this study could be bad for me?

There are no known risks to participating in this study.

What happens to the information collected for the research?

We will make every effort to limit the use and disclosure of your personal information, including research study documents, to only the people who have a need to review this information. We cannot promise complete confidentiality. The organizations that may inspect and copy your information include the IRB, Human Research Protection Program, and other authorized representatives of Virginia Tech.

If identifiers are removed from your private information or samples that are collected during this research, that information or those samples could be used for future research studies or distributed to another investigator for future research studies without your additional informed consent.

The results of this research study may be presented in summary form at conferences, in presentations, reports to the sponsor, academic papers, and as part of a thesis/dissertation. Federal law provides additional protections of your medical records and related health information. These are described in an attached document.

Can I be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval.

What else do I need to know?

We will offer to share your individual results with you. You may accept or decline these results.

Statement of Consent:

I have read and understood the above information. I have had an opportunity to ask questions and have all my questions answered. By completing the online survey of this study, I signify my consent.

Virtual Consent for Participating in Interviews:

Do you wish to participate? Yes No

Do you agree to be audio-taped? Yes No

Printed Name of Person Consenting: _____

Printed Name of Person Obtaining Consent: _____

Signature of Person Obtaining Consent: _____

Date: _____

Please notify the researcher if you would like a copy of this information to keep for your records.


Appendix H: Scheduling Link for Individual Interview


The Doodle poll website was used to schedule 1:1 interviews for this research study. A scheduling link was shared with potential participants, and they were able to sign up for a 30-minute time interview session. Below is a sample of the Doodle Poll sign up.

 Diana Rios

School Leaders' Perceptions Study

 45 min

 Zoom

 Thank you for agreeing to participate in this study...


More



Connect your calendar

See your availability and avoid double bookings

Choose a time to book

 United States, New York, New York City (GMT-4) ▾

May 2024



Monday, May 27

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

7:00 AM

8:00 AM

4:30 PM

5:30 PM

6:30 PM

7:30 PM

8:30 PM

Appendix I: Follow Up Email to Potential Participants Who Have Not Responded

Dear Potential Participant,

Hello! My name is Diana Rios, and I am a doctoral candidate in the Virginia Tech Educational Leadership and Policy Studies program under the supervision of my advisor and expert researcher Dr. Carol A. Mullen. Thank you for filling out the demographic survey that was shared out via professional organizations and the Facebook social media platform. The purpose of my research is to examine the perceptions and experiences of elementary school leaders in relation to the induction programming and support they are responsible for providing provisionally licensed teachers.

Last week an email was sent to you inviting you to participate in a research study. This follow-up email is being sent to remind you to please complete the scheduling link (insert Doodle Poll link) or contact me to schedule an interview.

Participants will be asked to take part in a one-on-one, audio-recorded, virtual interview and will have the opportunity to review the interview transcript after the interview has been completed. It should take approximately 30 minutes to complete the interview and approximately 15 to 20 minutes to review the transcript and confirm accuracy.

Thank you for your consideration for participating in my study. Please feel free to contact me with any questions.

Consent information form link

Scheduling link

Document collection survey

Respectfully,

Diana Rios
Doctoral Candidate, Virginia Tech

Appendix J: Email for Transcript Approval

Title of the Research Study: Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally Licensed Teachers

Principal Investigator: Carol A. Mullen, Ph.D., Educational Leadership & Policy Studies, Virginia Polytechnic Institute and State University

Co-Investigator: Diana Rios, Educational Leadership & Policy Studies, Virginia Polytechnic Institute and State University

Date: _____

Attached you will find a copy of the transcription of our interview conducted on _____.

Please review the transcript and choose one of the options below.

Option 1: I have read the transcription of our interview and agree that it can be used in its current state.

Option 2: I have read the transcription of our interview and would like the following additions or revisions to be made before moving forward. *Please share any additions/revisions in your response to this email.*

Option 3: I have read the transcription of our interview and would like to withdraw from the study. With this option, I acknowledge that the data from our interview will be destroyed.

Please respond to this e-mail with the option of your choice. If I do not receive a response within five business days of the date printed above, the information will be included in the study.

Additionally, if you have any relevant documents to share with the research team, you may share them at this time. Relevant documents may include, but are not limited to, meeting agendas, collaborative conversation logs, coaching agendas, or meeting notes. Any private communication should have identifiable information redacted prior to sharing with the researcher. A link to a QuestionPro survey with an upload question and text entry to provide related information about documents is attached. You may also e-mail the documents directly.

Respectfully,

Diana Rios
Doctoral Candidate, Virginia Tech

Appendix K: Interview Protocol

Title of the Research Study: Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally Licensed Teachers

Principal Investigator: Carol A. Mullen, Ph.D., Educational Leadership & Policy Studies, Virginia Polytechnic Institute and State University

Co-Investigator: Diana Rios, Educational Leadership & Policy Studies, Virginia Polytechnic Institute and State University

Each interview was conducted virtually on the Zoom web conferencing platform.

Before the Interview:

- Confirm consent for interview (consent form emailed to participants before the interview)
- Assign a pseudonym code to the participant
- Turn on the Zoom recording feature and enable captions

Interviewer: *Thank you for taking time out of your busy day to meet with me. I appreciate your willingness to participate in my study. This interview focuses on your perspectives and experiences as an elementary school leader on the induction programming and support you provide the provisionally licensed teachers (PLT) at your school. For the sake of this research study, a PLT is an educator who does not have an undergraduate degree in education from a teacher preparation program. They are hired into full-time teaching positions and build classroom experience on the job (Devier, 2019).*

*I will place the twelve questions for this interview in the Zoom chat for your reference at this time. **[Interviewer will paste in questions in the chat]** I will ask each of the questions as stated. Please answer the questions and feel free to expand on your responses.*

This interview should last 30 minutes. Do you have any questions before we begin? [Answer any questions.] If your questions have been answered, we will get started with question one.

Note: *The researchers may interject with probes such as, but not limited to, "Tell me more," "Could you expand on that," or "Can you share an example?" in order to collect more detailed information.*

1. What strategies do you use or recommend for supporting provisionally licensed teachers in elementary schools?
2. How do you differentiate your induction support for your PLT?
3. What are some of the ways your administration dedicates time to supporting PLT?
4. What does the structure of your meetings with PTL look like?
5. What are some of the topics of focus you can recommend in supporting your PLT?
6. What have been your biggest successes in supporting PLT?
7. What have been your biggest challenges in supporting PLT?

8. How does supporting PLT differ from supporting traditionally licensed new teacher support?
9. How has your experience in supporting provisional licensed teachers changed over the past 3 years?
10. What additional support or resources do you need to help support these teachers?
11. Is there anything you would like to add about supporting provisionally licensed teachers?
12. Do you know any other leaders that might be interested in participating in this study?

Interviewer: *Thank you for sharing your time and thoughts with me today. After the conclusion of this interview, I will share your transcript with you to allow you to review your responses and provide any changes or revisions. Please make sure to send any revisions to me within five business days of transcript receipt.*

End of the Interview:
Turn off Zoom recording

Appendix L: Test Interview Email to Colleague

Subject Line: Invitation to Participate in Research Study Pilot

Dear _____,

Thank you for being willing to participate in my doctoral research study. As you know, I am currently working on my dissertation in the Virginia Tech Educational Leadership and Policy Studies program under the supervision of my advisor, Dr. Carol A. Mullen. My study, Examining Elementary School Leaders' Perceptions of Induction Supports for Provisionally Licensed Teachers, has been approved by the Virginia Tech Institutional Review Board (24-549).

I am writing to request your input as a test participant to provide feedback on my interview questions. If you are willing to act as a test participant, the interview will be conducted one-on-one, virtually via Zoom. The interview will not be recorded and should last approximately 30 minutes. I will take notes during the interview. At the end of the interview, we will discuss any questions I should adjust or add so that I accurately capture elementary school leaders' perceptions of induction supports for provisionally licensed teachers. Attached you will find the interview questions.

I look forward to hearing from you to set up the time and date for the interview. Thank you again for your support.

* Link to interview protocol questions *

Respectfully,

Diana Rios
Doctoral Candidate, Virginia Tech