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First-Year Teachers' Perceptions of their Readiness for the Classroom

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First-Year Teachers' Perceptions of their Readiness for the Classroom

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Approval Page

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As it is for many people, this work has become a lifetime achievement. In my early college years, while I thought I might complete a Doctoral program, life intervened and provided me with a wonderful husband and five terrific sons! While I was not able to continue my education initially, I also felt that the school had not challenged me and I did not want to continue on in education, to not be challenged. Through the work at Gardner-Webb, the rigorous program of study, and the highly qualified professors, I can finally say, "I have been challenged!"

Abstract

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This study addresses the impact of teacher preparation programs on novice teachers' perceived readiness for the classroom. An explanatory sequential mixed-method, three-phase design was used involving two collections of quantitative data and a focus group convened to explore themes that emerged from quantitative data. Data collected suggest whether the type of teacher preparation program completed by a preservice teacher impacts a novice teacher's perceived sense of readiness for teaching.

Butin (2010) discussed "translating research into effective practice has been the weak link" (p. 4) in research studies. Studying a potential connection between teacher sense of readiness for the classroom and the needs they identify that will support them in their first year may reduce teacher attrition by providing North Carolina teacher mentor programs access to the types of support teachers feel they need in order to remain in teaching and provide teacher preparation programs with suggestions for focused instruction to meet teacher perceived needs.

This study found traditionally certified teachers' perceptions of readiness to teach declined during their first year, whereas lateral entry teachers' perceptions of readiness to teach increased during their first year. Strategies to address the needs identified by teachers in the study including the needs related to teacher knowledge of learners, knowledge of subject matter, and knowledge of teaching are discussed in relation to the study's findings.

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Chapter 1: Introduction

Introduction

Gladwell (2008) noted that it took 10,000 hours of practice to achieve mastery in a field. A novice teacher in his or her first year teaches approximately 1,080 hours (180 days x 6 hours per day), indicating that it would take between 9-10 years of full-time teaching to become a master teacher. When novice teachers consider leaving teaching soon after starting their careers, it is costly to both students and school systems (BEST NC, 2015; Boyer & Gillespie, n.d.; Corcoran, 2007; Darling-Hammond, 2009; Darling-Hammond & Ducommun, 2011; Gray & Taie, 2015; Shockley, Guglielmino, & Watlington, 2006). "Large numbers of teachers leaving our schools are sapping the ability of our educational institutions to provide quality educational opportunities for students" (Shockley et al., 2006, p. 113). Barnes, Crowe, and Schaefer (2008) reported that in one North Carolina school district, the cost when teachers left was as much as $10,000 per teacher. Their report suggested that by providing high quality resources to novice teachers, the price associated with teacher attrition could be reduced by half (Barnes et al., 2008).

Additionally, Goe (2010) reported that teacher effectiveness increased over the first 5 years of service. Therefore, helping to understand the needs of novice teachers so they are prepared to handle the expectations of daily classroom life can not only reduce the cost to schools by reducing teacher attrition but can also facilitate the growth of student achievement (Barnes et al., 2008; Goe, 2010).

In 2015, enrollment in North Carolina teacher education programs was down 20% (Westervelt, 2015). In addition, teacher turnover has increased annually since 2010 (North Carolina Department of Public Instruction [NCDPI] Communication and

Information Division, 2015; North Carolina Teacher Turnover Report, 2015). Of the educators leaving the profession, 20% were beginning teachers, 32% were Teach for America Teachers, and 24% were lateral entry teachers; yet only 13% were career status teachers, indicating that novice teachers are leaving at an alarming rate (North Carolina Teacher Turnover Report, 2015, p. 6).

Nationally, the statistics are less dire (Education Reimagined, 2015; Hanna & Pennington, 2015). In a 5-year study completed by the National Center for Educational Statistics, between 10% and 17% of teachers did not return to teaching in the first 5 years (Gray & Taie, 2015, p. 3). Of these teachers, between 9% and 14% were traditionally certified teachers and between 10% and 20% were teachers who were certified by other means (Gray & Taie, 2015, p. 8). Ravitch (2016) summed up the call to action in North Carolina well: "Wake up, people of North Carolina! The legislators in your state are pummeling your public schools with a sledge hammer" (para. 1).

Research on teacher retention is not a new subject; however, through the recession in 2008, the implementation of Common Core in 2012, and in 2015 and 2016, the political maneuvers that have taken significant funds away from schools and teachers in North Carolina, finding ways to retain new and experienced teachers is at the forefront of many principals' minds, taking time away from instructional improvements that could increase achievement (Bottoms & Schmidt-Davis, 2010; Darling-Hammond & Ducommun, 2011).

Ascertaining the reason some teachers leave and identifying methods to retain novice teachers, "especially the good ones!" (Induction Coach, personal communication, November 2015), was a daily conversation for the Induction and Success Department of an urban school district in North Carolina. The Induction and Success Department serves

novice teachers through their third year of teaching. The department provides an orientation for all new teachers and provides ongoing, required, and supportive professional development. In addition, through the work of the department's five Induction and Support Coaches, new teachers are supported and monitored, mentors are trained, and collaboration with Lead Mentors at each school occurs.

Learning the reasons teachers chose to leave the profession they spent years training for, or stopped a different career for, is one component that may help to reduce the percentages of teachers who leave within the first few years of teaching. This research analyzed perceptions of novice teachers entering teaching through the traditional teacher preparation route and entering teaching through the lateral entry teaching route with regard to their level of preparation prior to beginning an education career as well as after teaching for several months. In addition, it identified support structures teachers perceived they needed prior to, and during, the first year in the profession. Finally, the results of this research identified areas of support and improvement that may be beneficial to both teacher preparation programs and new teacher support programs.

Overview of Chapter 1

The subsequent pages in this chapter will briefly review the literature related to the study of teacher attrition and teacher preparation and the impact that attrition of new teachers has in the field of education. The chapter will then move on to discuss the problem statement and purposes of this study and the research questions and hypotheses that will be examined. The chapter will further explore the theoretical and conceptual frameworks from which the research will be viewed and the potential impact of the research being conducted. Next, a summary of the research design and methodology will be discussed along with concise definitions that relate to key constructs in the

dissertation. Finally, prior to the overall chapter summary, assumptions, the research scope and delimitations, limitations, and significance will be discussed.

Background

Losing teachers, losing public funding to charter schools, losing equitable pay for teachers, and losing respect have been reported as critical aspects of the educational situation in North Carolina (M. Brown, 2015; Corcoran, 2007; Darling-Hammond, 2009; Darling-Hammond & Sykes, 1999; Graziano, 2005; Kopkowski, 2016; NEA Research, 2008; Ravitch, 2016). While each of these critical aspects of the educational situation in North Carolina in 2016 merit considerable research, the focus of this work was on finding potential links between teacher preparation programs, teachers' perceptions of being prepared for the realities of the work in a public-school setting, and the supports teachers need so that despite the negativity surrounding education in this state, novice teachers, no matter their training, will stay in teaching.

Overall, local and private universities account for 51% of teachers who teach in North Carolina. Twenty-nine percent of teachers herald from out of state, and 15% use alternative entry methods. In North Carolina, less than 1% of teachers are from the Teach for America Program (BEST NC, 2015). In the county where this research took place, 61% of first-year teachers come from North Carolina public and private universities, 24% from out of state, 10% use alternative entry pathways, and 3% join through the Teach for America program (BEST NC, 2015). Studying the relationship between teachers' perceived levels of readiness and their preparation for the profession has a limited research base. The literature review, Chapter 2, details the research to date on teachers' perceptions of readiness for work in the public classroom.

Possible Reasons for Attrition

Marginalization. "Marginalization is related to, but different from, inequality. While academic definitions vary . . . [marginalization] describe[s] situations of acute and persistent disadvantage in education" (UNESCO, 2009, p. 5). Novice teachers have many influences that can impact their success or failure in their first year of teaching. Furthermore, their perceptions of job satisfaction or dissatisfaction can be impacted by their sense of readiness for teaching (Darling-Hammond, 2006). Unfortunately, novice teachers enter a teaching world where teachers and teacher educators are experiencing greater and greater marginalization (Cody, 2013; George, 2009; Jones, 2009; Kagan et al. 2001; Maher & Tetrealut, 1999; Murrow, 2006; Schmertzing, 2007). Kagan et al. (2001) discussed marginalization as a possible "shifting phenomenon" (p. 2), characterized by time periods in a person's life when the person may be included in the traditional social structure but also time periods where a person is marginalized. As people mature, they may be more at risk of being in a marginalized culture, or the work they chose might be a precursor for marginalization. Kagan et al. discussed two specific types of marginalization: people who are voluntarily marginalized and people who are involuntarily marginalized (p. 3). Marginalization of teachers can have a large impact on a teacher's job satisfaction and overall desire to remain in the position. Kagan et al. stated,

> People who are marginalized have relatively little control over their lives and the resources available to them; they may become stigmatized and are often at the receiving end of negative public attitudes. Their opportunities to make social contributions may be limited and they may develop low self-confidence and self-esteem. (pp. 3-4)

Concurring, Schmertzing (2007) discussed the history of education and the marginalization of the teacher's voice over the past century. In his opinion, teachers were isolated from the teaching reform movements that occurred during the 21st century, as they lacked training and knowledge of the research-based strategies they were required to use in their classrooms. Efforts to strengthen teachers' voices and overall levels of respect were diminished by the media's focus on negative issues, rather than the huge successes that teachers achieved annually (Hartney, 2015). Schmertzing suggested that teachers conduct action research in their classrooms to develop a deeper understanding of what works in education (Marzano, 2007; Marzano, Pickering & Pollock, 2005). He ascertained that by conducting action research, teachers would understand the ways large-scale research recommendations might work, or not work, in their school, in their town, and in their state. Schmertzing summarized his points by concluding, "for schools to be more effective and for teachers to be more satisfied in their work, teachers need to take more control over their workspace" (p. 20), thereby strengthening their voice and increasing their level of respect in the public's eye. Cody (2013) summed up the call to action asserted by Ravitch (2016):

> We have, in our nation, two parallel conversations going on about education. One is the conversation sponsored and controlled by the billionaires driving corporate reform. The other is that of teachers, parents, and students who are the subjects of these reforms. (Cody, 2013, p. 1)

Cody (2013) explained this phenomenon at an Education Nation event in 2013, where the featured speakers had very little experience working with children or expertise in education. He asked, "Can you imagine a summit on healthcare that included not a single prominent doctor?" (Cody, 2013, p. 1), and continued on to assert, "in the biggest

public arena where education is discussed, teachers have been silenced, their expertise ignored . . . [and] teachers have something akin to minority group status" (Cody, 2013, p. 1).

Work environment. Wages, teacher evaluation, teacher expectations, and teacher preparation are other aspects of teacher working conditions that contributed to teacher attrition (Graziano, 2005; Kopkowski, 2016; Sawchuk, 2015). "Workplace conditions are sometimes so surreal they make leaving the profession seem like [teachers'] best or only option" (Kopkowski, 2016, para. 3).

***Wages*.** BEST NC (2015) reported 52% of teachers in North Carolina held a second job on top of their full-time teaching load. Smith (2015) concurred and also indicated North Carolina ranked third in the number of teachers who felt the need to take on second jobs to provide for their families. While the extra work put teachers on a fast path to burnout, this phenomenon has plagued teachers for decades (Dworkin, 1987; Graziano, 2005). However, rather than increasing teachers' salaries to reduce the need for extra income, in 2014, North Carolina legislators eliminated the pay scale for teachers who completed a master's degree (Sawchuk, 2015); and while teachers with only a few years of experience were given a pay increase, more experienced teachers received little or no pay raise (Sawchuk, 2015). "The bottom line for many educators, especially new ones, is that their income doesn't pay the rent and bills" (Kopkowski, 2016, para. 29).

Teacher evaluation. Educator Value-Added Assessment System (EVAAS), a statistical measure of student growth, is the tool used to evaluate North Carolina public school teachers' effectiveness in the teacher evaluation process (NCDPI, 2015). The EVAAS score a teacher receives at the end of an evaluation year became the data point in the sixth standard of the teacher evaluation process (NCDPI, 2015). In 2012, when the

evaluation standards were implemented, teachers were given 3 years to "make growth" or risk losing their jobs. At that time, the sixth standard alone could determine a teacher's future in teaching if the teacher was unable to make growth for 3 consecutive years (NCDPI, 2015). In a study conducted by Oakes and Robertson (2014), 58% of teachers reported feeling "a lot of stress" (p. 8) with this teacher evaluation system, and only 29% of participants in the study reported that they received enough training on the new evaluation system to prepare them to teach in an effective manner (Oakes & Robertson, 2014, p. 10).

Teacher expectations. Swift (2012) noted,

> The role of the teacher in any classroom is very important and is an essential part of the learning process. The classroom teacher is not only an instructor, but a researcher as well, and the teachers should be constantly examining and reviewing the quality of instruction and making improvements as needed by including the latest research in the classroom setting. (p. 76)

However, "it doesn't make sense to hold people accountable for things over which they have no control" (Kopkowski, 2016, para. 15). When implemented in 2001, No Child Left Behind (NCLB) imposed mandates with little or no training for teachers (Kopkowski, 2016). For instance, once the law was passed, schools had to immediately send home letters to parents labeling teachers who were, upon implementation of the law, deemed not highly qualified, demoralizing some teachers (Kopkowski, 2016). Often, new teachers were sent to low-performing schools with high turnover rates and low staff morale (Kopkowski, 2016). In these schools, teachers were held accountable for the implementation of multiple initiatives without sufficient training or support (New Teacher Center, 2016). High stakes testing, where test results determine a teacher's

career path, was another factor found to impact teacher attrition (Kopkowski, 2016). Finally, changing standards and added job duties have been attributed to teacher turnover (Reuter, 2016).

Teacher preparation. Teacher preparation programs experienced declines in enrollment between 2004 and 2012 (E. Brown, 2015; Sawchuk, 2015). The literature attributed the declines to the political climate at the time, a weak economy, and the lack of respect teachers received (E. Brown, 2015; Sawchuk, 2015); however, a decline in enrollment in teacher education programs did not explain the increase in teacher attrition after teachers secured a full-time position in teaching. While additional literature discussed components of teacher preparation programs and novice teachers' efficacy, a lack of research existed on preservice teachers' perceptions of their readiness levels for the daily expectations that are inherent in teaching and the supports novice teachers identify as necessary to minimize attrition (Barry, 2010; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009a; Brabeck et al., 2014; Brenneman, 2015; Clark, Barnes, & Sudweeks, 2015; Darling-Hammond, 2012a; Darling-Hammond, Chung, & Frelow, 2002; Ferlazzo, 2012; Fisman, 2012; Pomerance, Greenberg, & Walsh, 2016; Newville, 2011; VonHoene, 2016).

Purpose of the Study

The role of the teacher can be ambiguous. "Many hardworking teachers actually harbor misunderstanding about what their job requires" (Wiggins & McTighe, 2007, p. 1). Some teachers believe their job is only to cover the content, engage students with interesting activities, or teach to the test (Wiggins & McTighe, 2007). In the classroom, teaching involves direct instruction, facilitation, and coaching. Outside the classroom, teaching involves analysis of data to guide daily preparation.

> While accurate measures of teacher attrition are important if school systems, administrators, and potential teachers are to effectively plan for the coming years, the need to identify factors which cause teachers to remain in the profession is perhaps of greater importance. (Inman & Marlow, 2004, p. 605).

In fact, keeping qualified teachers in schools is essential for student success (Darling-Hammond & Ducommun, 2011).

Through the analysis of first-year teachers' self-reported sense of being prepared for the classroom, their confidence in their knowledge of different types of learners, their knowledge of the subject matter they teach, and their knowledge of teaching (Darling-Hammond, 2006), this study examined three elements of teaching that may have contributed to the factors that impact the decision novice teachers make when deciding whether or not to remain in teaching after their first year. In addition, it analyzed the differences, if any, between teachers who entered the profession as traditionally trained teachers or as lateral entry teachers.

Audience

Butin (2010) noted that "translating research into effective practice has been the weak link" (p. 4) in research studies. Determining the needs of teachers during their first year may provide teacher preparation programs and support programs for lateral entry teachers in school districts strategies to enrich their programs and, in turn, increase enrollment. As the teacher shortage in North Carolina continues, it may be that more educators will enter the profession through nontraditional means. For this reason, the research may be of particular interest to districts trying to support lateral entry teachers. It may also provide North Carolina teacher mentor programs access to the types of support novice teachers, despite their prior preparation, feel they need in order to remain

in the profession.

Nature of the Study

This study addressed novice teachers' perceived readiness for the classroom as well as the types of support teachers perceived they needed during their first year of teaching.

Research Questions and Hypothesis

This study focused on the following research questions with regard to novice teachers in an urban North Carolina school district.

1. How does novice teacher perceived readiness for teaching change during the first year? (Quantitative)
    a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach?
    b. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of learners and their development in social contexts?
    c. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of subject matter and curriculum goals?
    d. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of teaching?
2. What support structures contribute to novice teachers' perceptions of job readiness? (Qualitative)

The hypothesis for this work was, "Teachers with traditional teacher certification will report an increase in the perception of readiness to teach over lateral entry teachers."

The null hypothesis is that there is not a significant difference between teacher reports of readiness to teach and the type of teacher preparation program.

The independent variable in the quantitative component of the study was teacher perception of readiness for teaching. The dependent variables in this study were teachers' perceptions of readiness in the areas of their "knowledge of learners and their development in social contexts; knowledge of subject matter and curriculum goals, and knowledge of teaching" (Darling-Hammond, 2006, p. 203).

Methodology

The study was a mixed-methods study (QUAN ➔ qual) determining if there were relationships between new teachers' self-reported perceived readiness to teach at the beginning of their career and their self-reported perceived readiness to teach at the midpoint of their first year. In addition, the study identified support structures that new teachers perceived as beneficial during their first year and identified some relationships between teachers entering teaching from a traditional teacher preparation program or from a lateral entry route. As "some stakeholders may find certain types of measures or evidence more credible than others" (Fitzpatrick, Sanders, & Worthen, 2011, p. 386), a mixed-methods design delivers a comprehensive review of a concept, thus providing a "complete understanding of research problems/questions" (Creswell, 2014, p. 218).

An explanatory sequential mixed-methods, three-phase design (Creswell, 2014) was used involving two collections of quantitative data where the raw, quantitative survey data were presented and analyzed and then a focus group was convened to gather in-depth qualitative data.

In the first, quantitative phase, of the study, data archived from a school district in North Carolina were analyzed and coded. This survey was developed by district leaders

to understand the needs of new teachers and to identify if there were any predetermining factors that contribute to teacher attrition in the district. The survey, while planned by the district, had not been implemented until this researcher approached the Executive Director of Accountability and Research in June 2016 (EDRA, personal communication, June 2, 2016). At that time, a New Teacher Survey group was convened, including the Executive Director of Accountability and Research, the Executive Director of Human Resources, the Executive Director of Induction and Success, and this researcher. The group met during the summer of 2016 to develop the survey that would be distributed to new teachers in the fall of 2016 (New Teacher Study Team, personal communication, July 7, 2016, July 20, 2016, August 16, 2016, August 31, 2016). The survey sample population comprised teachers identified as Beginning Teacher 1 in one of the four largest school districts in North Carolina. Survey participants responded to the first survey during the required district orientation program prior to the beginning of their teaching career or as close as possible to their first day of teaching. After approval of this proposal, this researcher analyzed the archived, raw survey data using the tools available in the SAS software program.

Through the quantitative data gathered in the survey, aspects of teacher preparation were compiled to yield an overall "readiness" score using the components from Darling-Hammond's (2006) "Framework for Understanding Teaching and Learning" (p. 304) which included the subcategories knowledge of learners and their development in social contexts, knowledge of subject matter and curriculum goals, and knowledge of teaching.

A second component of this study was longitudinal in nature. Teachers who agreed to complete the district survey at the beginning of the 2016 school year were

asked to respond to a second survey after 6-8 months of teaching, each using the school system's email exchange system. Upon receipt of the survey responses, the data were analyzed to find relationships between expectations prior to beginning teaching and the needs of teachers midway through their first year.

Finally, an exploratory follow-up was implemented. A small focus group was convened, chosen from the survey participants, that explored teachers' perceptions of the support structures they felt were needed during their first year. The focus group was held at the Induction and Success Professional Development Center in the county where the study was conducted. More information on the study's methodology is presented in Chapter 3.

Conceptual and Theoretical Frameworks

Constructivism. "Constructivism seeks to change existing cognitive structures by allowing students to explore new alternatives" (Yost, Sentner, & Forlenza-Bailey, 2000, p. 42). Fighting against the social and political forces, teacher education and induction programs in school systems focus on training and supporting preservice and novice teachers to develop the skills necessary to be ready for teaching in a public-school classroom. Teacher education and induction programs that employ constructivist practices which "focus closely on what beginning teachers already know and believe about teaching" (Wideen, Mayer-Smith, & Moon, 1998, p. 167) and facilitate a thoughtful process in which teachers utilize reflective practices that create "tension and uncertainty so that preservice teachers will focus on the multiple dimensions of a dilemma and subsequently choose from a wider assortment of options" (Yost et al., 2000, p. 43) are considered optimum programs for developing 21st century educators (Darling-Hammond, 2006). As teachers form new realities of teaching based on their daily

experiences (Ayaz & Şekerci, 2005; Bushman, 1996; Culatta, 2015; Harrington & Enochs, 2009; Miller, 2011; Trochim, 2006), positive experiences with supportive staff and administrators yield happier teachers (Zakrzewski, 2012). Conversely, negative experiences with staff and administrators yield frustrated teachers who are more likely to leave education within a few years of beginning their career (Jasper, 2014; Long, 2012; Zakrzewski, 2012). Figure 1 depicts the delicate balance between the marginalization of teachers and the constructivist lens of teacher preparation.

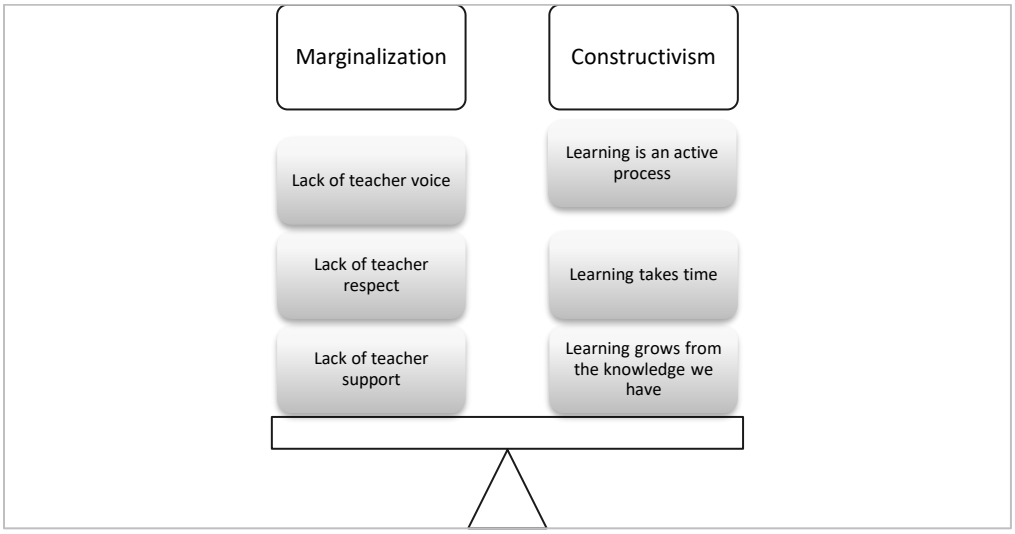

Figure 1. Tipping Point: The Impact of Marginalization Constructivism on Learning (Brooks & Brooks, 1999; Cody, 2013; George, 2009; Jones, 2009; Kagan et al., 2001; Trochim, 2006).

As teachers utilize an active process in their classrooms, their knowledge grows (Lew, 2010; Plourde & Alawiye, 2003) and teachers then begin to use their voice to discuss issues that impact their work (Oshrat-Fink, 2014); however, if collaboration is not present and new teachers are ostracized (George, 2009; Schmertzing, 2007), the teachers

"lack the opportunities to make social contributions . . . and they may develop low self-confidence and self-esteem (Kagan et al., 2001, p. 4).

Framework for teaching and learning. Darling-Hammond (2006) found that teacher education and induction programs supported preservice and novice teachers and increased the likelihood that teachers will remain in the profession. Through her research, Darling-Hammond (2006) developed a Framework for Teaching and Learning (Figure 2). This Framework (Darling-Hammond, 2006) provided a foundation for teacher preparation programs to evaluate their programming and implement course work that could meet the need of both 21st century learners: teachers and students.

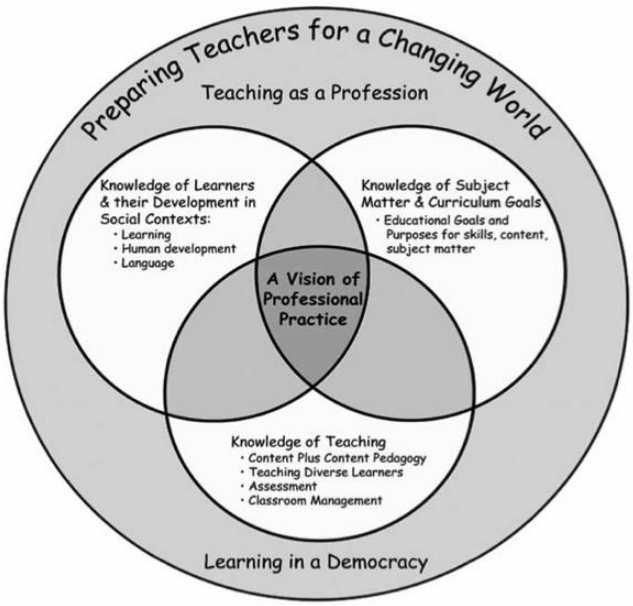

Figure 2. A Framework for Understanding Teaching and Learning. Reprinted from Constructing 21st century Teacher Education by Darling-Hammond (2006).

Darling-Hammond (2012a) further explained how the Framework was connected with teacher quality and teaching quality:

Teacher quality might be thought of as the bundle of personal traits, skills, and

> understandings an individual brings to teaching, including dispositions to behave in certain ways. Teaching quality refers to strong instruction that enables a wide range of students to learn. Teaching quality is in part a function of teacher quality— teachers' knowledge, skills, and dispositions—but it is also strongly influenced by the context of instruction: the curriculum and assessment system; the "fit" between teachers' qualifications and what they are asked to teach; and teaching conditions, such as time, class size, facilities, and materials. (p. i)

Definitions

The terms defined in this section are provided to ensure a common understanding of the terms that are used throughout the study. Most terms are accompanied by a citation; however, in situations where a definitive definition is necessary for understanding but a specific definition is not available, the researcher has clarified the term and provided synonyms used throughout the research.

Alternative licensure programs. Alternative licensure programs provide students who have completed a bachelor's degree or higher in a specific subject area a pathway to teacher licensure. Participants in alternative licensure programs may include individuals who have retired from other fields or who are transitioning mid-career. Alternative licensure programs require teachers to attend a supervised program while they teach, providing the teachers with core teaching pedagogy (U.S. Department of Education, 2015).

Confidence. "A judgement of capabilities for accomplishment of some goal" (Druckman & Bjork, 1994, p. 173).

Constructivism. "People construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences" (EBC, 2004,

para. 1).

First-year teacher. A teacher working in their first full-time teaching role in which the teacher has full responsibility for a class of students. Other terms include "novice teacher," "mentee," and "beginning teacher."

Practicum. A 3- to 4-week observation and, sometimes, hands-on experience for preservice teachers in which they visit multiple settings so they have exposure to different types of classroom settings (University of Hartford, n.d.).

Preservice teacher. A student in a teacher preparation program who is completing an observation, practicum, or student teaching experience (Kennedy, 1999).

Readiness. The perception that a person employed as a teacher has the knowledge, skills, and dispositions necessary to meet the demands of working in a public school setting (Abbatte-Vaughn, 2006).

Student teaching. A semester of teaching with a supervising teacher in which the supervising teacher gradually releases responsibility to the student teacher for planning, instruction, assessment, and discipline; supports guidance for the student teacher; and then resumes responsibility for the class, gradually, at the end of the semester (Gardner-Webb University School of Education, 2012).

Teacher preparation program. The training program a preservice teacher completes prior to full-time employment as a classroom teacher (Cochran, King, & DeRuiter, 1991).

Scope and Limitations of the Study

Scope. The study addressed teachers' perceptions of readiness to teach in a public school classroom. The study developed an overall readiness score by combining teachers' survey responses to consider how ready a teacher feels after his or her student

teaching experience(s) through his or her responses to survey items (Appendices A and B) related to Darling-Hammond's (2006) "Framework for Understanding Teaching and Learning" (p. 304).

Limitations of the study. As learning is an ongoing process, the study could not address all aspects of learning that occur while teachers are in the classroom nor the influence the staff and students have on the teacher during the time period of the study. In addition, the study was limited to new teachers in one school district in North Carolina. Therefore, results are specific to that district and may not be generalizable in other districts or across the state.

Chapter 1 Summary

This chapter provided an introduction to the problem of teacher preparation and teacher attrition. Facts and figures are discussed which relate to teacher attrition in North Carolina. The research questions, theoretical and conceptual framework from which the study will be viewed, as well as the focus, scope, and limitations of the study were also discussed in this chapter. In Chapter 2, a thorough review of the literature on teacher preparation will be discussed.

Chapter 2: Literature Review

Overview of Chapter 2

Since the early 1800s, preservice teacher development programs have existed in the United States to provide some form of preparation for teachers of young children (Newville, 2011; Ross, 2014). Over time, these programs have evolved from providing a high school education for preservice teachers to developing the pedagogical and content knowledge preservice teachers can apply in 21st century classrooms. Programs also moved from apprenticeship models to models that included a field experience component in their teacher education graduation requirements such that preservice teachers were required to spend a specific number of hours in practical, classroom experience with a supervising teacher (Darling-Hammond, 2006).

This chapter will review the history of teacher preparation in the United States, teacher effectiveness and perceptions of readiness, preservice teacher preparation, the conceptual and theoretical frameworks for this study, teacher attrition, novice teacher needs, lateral entry teachers, novice teacher support programs, and the pathways to teacher licensure in North Carolina in 2016.

History of Teacher Preparation in the United States

Significant political, theoretical, social, and economic issues over the past 200 years shaped the focus of teacher preparation programs (Darling-Hammond, 2006; Friedman & Mandelbaum, 2011; Newville, 2011). Normal schools were the first teacher preparation programs in the United States. While sources differ on where and when the first normal school opened in the United States (Harper, 1939; Hilton, 2011; Newville, 2011), the focus of normal schools was to train teachers “in educating all the children of all the people” (Harper, 1939, p. 14). Normal schools were not begun without

controversy, and thus began the onset of a national debate on how teachers should be prepared, on the content and pedagogical knowledge teachers should receive in their training, and on the standards to which teachers must be held accountable. In 1862, The Morrill Act established land grant colleges to provide education for students in fields that were necessary for the development of the country (Friedman & Mandelbaum, 2011). Additional legislation was added to the land grant college program in 1917 at which time the Smith-Hughes Vocational Education Act provided specific funds for teacher training (National Research Council, 1995). These acts of legislation broadened the reach of teacher training programs across the United States. As programs opened, debate continued on the scope of the curriculum and overall preparation standards teachers should master during their preservice years. In 1918, an educational supervision association, the Progressive Education Association, was opened (Progressive Education Network, n.d.). Leaders in this network of educators included John Dewey, a foremost educator in the early 20th century. Prawat (2009) reported that Dewey had

> three key ideas . . . that continue to resonate with progressive or, in current usage, constructivist U.S. educators. . . . In fact, all three of the great reform movements in U.S. education, in the 1930s, 1960s, and 1990s, highlighted variations on these three themes: Individualism, the notion that it is up to the individual child, with guidance from the teacher, to make sense of his or her own experience; readiness, the notion that the child will learn when he or she is ready to learn; and pragmatism, the notion that the worth of learning lies in its instrumental value. (para. 3)

Constructivism. Constructivists hold to the belief that a teacher adds to his or her prior knowledge based on his or her life experiences (Brooks, 1987; Brooks &

Brooks, 1999; Clark et al., 2015). Knowledge cannot be forced upon the learner nor can learning be stopped (Brooks, 1987; Brooks & Brooks, 1999). Connell, Stein, and Gardner (2012) used the term "mental models" to describe the choices teachers make daily. Mental models, they asserted, support the "understanding, reasoning, and decision making" (Connell et al., 2012, p. 273) teachers make from their "observations about student behavior and performance, to predict what will happen in response to possible actions they might take" (Connell et al., 2012, p. 274). They went on to remind the researcher "that even though the objective classroom situation is identical . . . there are a myriad ways teachers might interpret [the] situation, and for each interpretation, there are a myriad ways teachers might respond to it" (Connell et al., 2012, p. 274). In a more recent publication, Stein (2015) further supported this view: "The mind is best understood as a complex and dynamic system, always in process, always changing, growing and becoming more diverse and differentiated" (para. 7).

Constructivist ideas have influenced many educator, politician, and parent views of education since (Friedman & Mandelbaum, 2011); however, the Great Depression (1929-1940) and World War II impacted teacher preparation programs' implementation of these themes. During the Great Depression, teacher education programs were limited in funds; therefore, teacher preparation programs focused on developing only the practical skills teachers needed (Newville, 2011), and teacher shortages during World War II saw the implementation of emergency teacher certification programs as workers took on jobs that paid more than teaching positions (Friedman & Mandelbaum, 2011; Newville, 2011).

Ruff, Snyder, and Petrich (2010) provided examples of constructivism in a 21st century classroom. Teachers who employ "[d]iscovery learning, [i]nquiry learning,

[p]roblem based learning, [d]iscussion, and [c]ooperative learning groups" (Ruff et al., 2010, p. 4) and who design lessons that are relevant to student needs, value and challenge students' points of view, and formatively assess students such that lessons are changed based on the outcome of the formative assessment are reported to be teaching from a constructivist perspective (Ruff et al., 2010).

Teacher preparation programs. The launch of Sputnik in 1957 refreshed a national debate about where the focus of teacher preparation programs should be: content knowledge, pedagogy, or standards (Newville, 2011). At that time, the National Council for Accreditation of Teacher Education (NCATE) was begun "to help establish high quality teacher preparation. Through the process of professional accreditation . . . NCATE works to make a difference in the quality of teaching and teacher preparation today, tomorrow, and for the next century" (NCATE, 2014a, para. 2). In 2016, this organization became known as the Council for the Accreditation of Educator Preparation (CAEP). CAEP oversees the accreditation of teacher preparation programs and focuses on five standards: (a) content and pedagogical knowledge; (b) clinical partnerships and practices; (c) candidate quality, recruitment, and selectivity; (d) program impact; and (e) provider quality continuous improvement and capacity (CAEP, 2015).

> Following Sputnik, the Civil Rights Era saw
>
> profound changes in American education and improved the educational opportunities of millions of students. Many barriers that once prevented minorities, women, individuals with disabilities, and older persons from freely choosing the educational opportunities and careers they would like to pursue [were] eliminated. (U.S. Department of Education, 2015, para. 3)

Teacher preparation during this time became focused on teacher competency.

Warren (1985) asserted that the cyclical nature of the design of teacher preparation programs should be a cause for concern. Warren noted that rather than being driven by the economic forces of the time period, teacher preparation programs should rely on "professional judgment about teacher education" (p. 11) and on the "difficult responsibilities [of teaching], which are to conceptualize, innovate, and analyze disparate educational and policy phenomena" (p. 11). What once started as an apprenticeship, the movement of teacher preparation into university programs, "spelled the beginning of the end of independent professional preparation" (Cochran-Smith, Feiman-Nemser, & McIntyre, 2008, p. 296). In the early 2000s, Labaree, as cited in Cochran-Smith et al. (2008), found that schools of education were stronger academically than they were professionally relevant, as the schools were competing with other departments in the university for overall recognition. Consequences of this movement yielded programs that lacked rigorous, relevant training due to the marginalization of education departments in some institutions (Cochran-Smith et al., 2008).

Twenty-first century ideas for "innovative" teacher preparation programs reverted back to ideas that originated in the apprenticeship-type model (Boyd et al., 2009a; Brownell, Ross, Colon, & McCallum, 2005; Cydis, 2014; Darling-Hammond, 2006; Malone, 2008; Samuel, 2010; Yost et al., 2000). For instance, Yost et al. (2000) asserted, "teacher education programs that maintain a consistent focus or mission and engage in constructivist practices have demonstrated promising results" (p. 41).

In addition, researchers suggested implementing critical reflection into teacher preparation programs. Reflection was previously suggested and defined by Dewey (as cited in Yost et al., 2000) as "an active persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds supporting it and future

conclusions to which it tends" (p. 39). A teacher who employs critical reflection "is one who makes teaching decisions on the basis of a conscious awareness and careful consideration of the assumptions on which the decisions are based, and the technical, educational, and ethical consequences of those decisions" (Yost et al., 2000, p. 41).

Brownell et al. (2005) reported that exemplar teacher education programs "stressed the importance of extensive, well-planned, and well-supervised field experiences" (p. 247). Field experiences in these programs emphasized reflection and collaboration with supervisors and program personnel. Malone (2008) and Cydis (2014) studied programs that implemented a personal learning plan or a competency-based methodology. They suggested that teacher preparation programs implement training methods that engage the learner in developing his or her own standards-based goals and evaluate his or her progress toward those goals. Similar to the apprentice model, teacher candidates in preparation programs that implemented this model would work with model teachers to implement and refine their work toward the achievement of the identified goals. Samuel (2010) discussed four models of teacher education programs: the master apprenticeship, the applied science model, the reflective practitioner model, and the critical-reflective practice model (pp. 5-6). These models also reflected prior models of instruction. Samuel asserted that the applied-science model was the predominant model of teacher training programs at the time; however, Boyd et al. (2009a) and Darling-Hammond (2006) documented research that supported the use of the other three models discussed by Samuel. Darling-Hammond (2006) noted the importance of diverging from the applied-science model of teacher education and instead implementing teacher education programs that have "extensive and intensely supervised clinical work-tightly integrated with course work-that allows candidates to learn from expert practice in

schools that serve diverse students" (p. 307). In addition, Darling-Hammond (2006) recommended teacher training programs immerse students in the extensive analysis of student work, thorough examination and analysis of lesson plans and teacher resources, and applying a critical lens to videos of teaching in action (p. 307).

Boyd et al. (2009a) indicated,

> teacher preparation that focuses more on the work of the classroom and provides opportunities for teachers to study what they will be doing as 1st-year teachers seems to produce teachers who, on average, are more effective during their first year of teaching. (p. 434)

They continued, "programs that provide more oversight of student-teaching experiences or require a capstone project supply significantly more effective 1st-year teachers" (Boyd et al., 2009a, p. 434) and "teachers who have had the opportunity in their preparation to engage in the actual practices involved in teaching . . . also show greater student gains during their 1st year of teaching" (Boyd et al., 2009a, p. 434).

As the needs of the learner became a greater focus in the most recent decade, Education Reimagined, a conglomeration of school superintendents, business leaders, researchers, and teachers' union representatives, suggested in 2015 that teaching become learner-centered and move away from the current paradigm in which teaching was designed for efficiency rather than based on the needs of the learner (A Transformational Vision of Education in the U.S., 2015). The authors suggested, "for the next generation to succeed, and thrive, their learning experiences must facilitate their development" (A Transformational Vision of Education in the U.S., 2015, p. 8) and

> be based on the mastery of skills; be personalized, relevant and contextualized; be focused on the learner as a participant; be embedded in meaningful relationships;

> and rooted in opportunities such that the learner is aware that leaning happens anywhere, anytime. (A Transformational Vision of Education in the U.S., 2015, pp. 7-8)

Pomerance et al. (2016) declared, "teacher candidates [should be required] to practice instructional strategies to the point of mastery" (p. 28) and referred to research that backed the revision of licensing exams to include six specific research-based instructional strategies rather than strategies that research has not proven their effectiveness (Pomerance et al., 2016). The six teaching strategies recommended by the report included paring graphics with words, linking abstract concepts with concrete representations, posing probing questions, repeatedly alternating problems with their solutions and problems that students must solve, distributing practice, and assessing to boost retention (Pomerance et al., 2016, pp. vi, 2, 19-25). The authors stated, "like any skill, repeated practice and considerable feedback is necessary for teacher candidates to gain proficiency in applying the fundamental instructional strategies in an actual class" (Pomerance et al., 2016, p. 16).

In his vision for the future teacher, Berry (2010) stated,

> The once-vexing struggle to secure qualified and effective teachers for all of America's 60 million students has been resolved. No longer is the "teacher quality" debate focused solely on measuring the effectiveness of individual teachers in isolated classrooms. Instead, most policymakers are more interested in how teachers grow professionally and spread their knowledge to others. In 2030, education accountability systems place a premium on how teachers learn as teams, both in their brick and mortar buildings and in virtual settings where they work with peers, mentors, and coaches. In 2030, curriculum and instruction

> drives accountability and results, not the other way around as it has for much of education's convoluted past. (p. 15)

Teacher Effectiveness and Perception of Readiness

Characteristics of effective teachers. In a meta study of what makes an effective teacher, Wilson and Floden (2003) found conclusively that there are large gaps in the research of what makes a teacher effective, how teacher preparation programs can prepare effective teachers, and how teacher effectiveness impacts teacher attrition. Notable from the research was the overall lack of a consistent definition of an effective teacher (Wilson & Floden, 2003). The research calls for much larger, multidisciplinary, mixed-methods studies to be completed that explore, among other things, "the effects of variations in field experiences, the ramifications for teacher supply of 4- versus 5-year programs, the retention of alternatively prepared teachers, [and] the links between certification and teaching performance" (Wilson & Floden, 2003, p. 28). Seven years later, the National Research Council (2010) similarly concluded that despite the vast amount of research, "there is little firm empirical evidence to support conclusions about the effectiveness of specific approaches to teacher preparation" (p. 4) and what makes an effective teacher.

Wayne and Youngs (2003) reviewed research on teacher characteristics and student achievement. In their analysis, they set parameters for the research that they reviewed, including but not limited to student socioeconomic status, prior achievement, and teacher characteristics. Their review supported the position that "high school students clearly learn more from teachers with certification in mathematics, degrees related to mathematics, and coursework related to mathematics" (Wayne & Youngs, 2003, p. 107) and that while "teachers differ greatly in their effectiveness . . . teachers

with and without different qualifications differ only a little" (Wayne & Youngs, 2003, p. 108). Their research conclusion supported flexible hiring practices by principals rather than adhering to specific qualifications; however, Corcoran (2007) suggested the hiring trends 4 years later had instead moved toward developing national accreditation standards and procedures for teacher education programs. Specifically, Corcoran recommended further study of the impact that content area knowledge, pedagogy, and student teaching experiences have on teacher overall preparation and effectiveness.

Wiggins and McTighe (2007) stated,

> The teacher's role, behavior, and strategies must stem deliberately from established mission and goals, the curriculum, and agreed-upon learning principles. In other words, the particular approaches, methods, and resources employed are not *primarily* subjective "choices" or mere matters of style. They logically derive from the desired student accomplishments and our professions understanding of the learning process. We teach to cause a result. Teaching is successful only if we cause learning related to purpose. (para. 7)

Given this assertion, the authors stated there was not one teaching approach better than another. Rather, they noted, a teacher must be skilled in identifying the needs of each student and then must decide which approach or approaches could be implemented and how for long the approach should be implemented (Figure 3). Wiggins and McTighe (2007) also reported that the role of the teacher as a facilitator and the role of the teacher as a coach had much larger yields and benefits for students than the role of a teacher delivering direct instruction.

Teacher Role (Method the Teacher Uses)	Learner Actions (What Students Need to Do)
Didactic/Direct Instruction	**Receive, Take In, Respond**
• Demonstration, modeling	• Observe, attempt, practice, refine
• Lecture	• Listen, watch, take notes, question
• Questions (convergent)	• Answer, give responses
Facilitation of Understanding	**Construct, Examine, Extend Meaning**
• Concept attainment	• Compare, induce, define, generalize
• Cooperative learning	• Collaborate, support others, teach
• Discussion	• Listen, question, consider, explain
• Experimental inquiry	• Hypothesize, gather data, analyze
• Graphic representation	• Visualize, connect, map relationships
• Guided inquiry	• Question, research, conclude, support
• Problem-based learning	• Pose/define problems, solve, evaluate
• Questions (open-ended)	• Answer and explain, reflect, rethink
• Reciprocal teaching	• Clarify, question, predict, teach
• Simulation (e.g., mock trial)	• Examine, consider, challenge, debate
• Socratic seminar	• Consider, explain, challenge, justify
• Writing process	• Brainstorm, organize, draft, revise
Coaching	**Refine Skills, Deepen Understanding**
• Feedback/conferencing	• Listen, consider, practice, retry, refine
• Guided practice	• Revise, reflect, refine, recycle through

Figure 3. Teacher's Roles and Related Actions. Adapted from "Schooling by Design" by Wiggins and McTighe (2007).

Marzano (2007) explained that effective classroom pedagogy includes the use of effective instructional strategies, the use of effective management strategies, and the use of effective classroom curriculum design strategies (p. 6). He furthered his assertion by responding to 10 instructional design questions that help a preservice or novice teacher

consider actions in response to the 10 design questions a preservice or novice teacher might ask to further develop their instructional tool bag to increase their effectiveness:

> What will I [the preservice or novice teacher] do to. . . :
>
> . . . establish and communicate learning goals, track student progress, and celebrate success?
>
> . . . help students effectively interact with new knowledge?
>
> . . . help students generate and test hypotheses about new knowledge?
>
> . . . engage students?
>
> . . . establish or maintain classroom rules and procedures?
>
> . . . recognize and acknowledge adherence and lack of adherence to classroom rules and procedures?
>
> . . . establish and maintain effective relationships with students?
>
> . . . communicate high expectations for all students?
>
> . . . develop effective lessons organized into a cohesive unit? (Marzano, 2007, p. 7)

NCATE (2014b) indicated that the qualities of an effective teacher include "knowledge of teaching and learning, subject matter knowledge, experience, and the combined set of qualifications measured by teacher licensure are all leading factors in teacher effectiveness" (p. 3). The Council's research concluded that "high quality pre-service teacher preparation provides beginning teachers . . . the knowledge and skills needed for effective teaching" (NCATE, 2014b, p. 16).

Measuring teacher effectiveness. Efforts to measure teacher effectiveness in recent years have utilized classroom observations, student surveys, and student achievement gains (Cantrell & Kane, 2013). At the end of a 3-year study, Cantrell and

Kane (2013) found,

> heavily weighting a single measure may incentivize teachers to focus too narrowly on a single aspect of effective teaching and neglect its other important aspects . . . [I]f the goal is for students to meet a broader set of learning objectives than are measured by state's tests, then too-heavily weighting that could make it harder to identify teachers who are producing other valuable outcomes. (pp. 10-11)

The research also yielded important conclusions about the use of multiple measures to determine teacher effectiveness. Cantrell and Kane (2013) recommended implementing a balanced system in which the criteria that is used to measure effectiveness is weighted the same across all dimensions:

> rigorous training for all principals, administrators, mentors, peer evaluators, or others who observe teachers to increase interrater reliability; measures that specifically add value to the evaluation; including student perception surveys and observations to help prioritize improvement initiatives; video that provides quality feedback for teachers; and training and assessment for learning and teaching. (p. 20)

Boyer (2003) found a strong effect size between teachers who implemented collaborative problem solving and student outcomes, and she recommended teacher preparation programs include this value-added program in the course work preservice teachers complete.

Teacher Perception of Readiness

Limited research exists on teacher perceptions of overall readiness (Clark et al., 2015). Recent research on teacher perceptions has focused on teachers' perceptions of

their abilities to teach specific subject matter such as math and reading or on the type of student teaching experience a teacher completed rather than the components of this study: readiness to manage a classroom, prepare lessons aligned with content standards, engage students, personalize instruction, analyze and respond to data, or prepare to teach all content components in a given role (Clark et al., 2015).

Clark et al. (2015) considered teacher perceptions of readiness as the perceptions related to the teachers' student teaching or internship experiences. They used cross-institutional data from preservice teachers who completed either a student teaching experience (teaching in a classroom with a supervising teacher for 15 weeks in 1 semester) or an internship (teaching in a classroom with a supervising teacher for 1 academic year) and followed up with the teachers after 1 year of teaching. The researcher's own literature review reported inconsistent results when comparing the length of student teaching experiences and teachers' perceptions of their ability to teach. In addition, "not a single study [was located] that examined teacher perceptions at both the preservice *and* inservice stages based on the type of student teaching experience teachers were assigned" (Clark et al., 2015, p. 173).

Preservice Teacher Preparation

The impact of teacher preparation is long lasting (Dickstein, 2013); and, as Bolster (1983) reported,

> Teachers' knowledge of teaching, once achieved, tends to be highly resistant to change. Principles of practice, honed in the demanding arena of the classroom, are not easily discarded or revised, even in the face of conflicting evidence from the most careful experimental studies. Teachers, in fact, appear to have a high degree of mistrust of knowledge about education. (p. 299)

Casual observers of teaching, including reporters who report on education and politicians whose decisions impact educators and students, often reflect the belief that "teaching is fundamentally a self-evident practice. What to teach should be obvious if you know your subject, and what to do at any given moment should be obvious from the situation" (Kennedy, 1999, p. 54). Given this belief statement, learning to teach encompasses both learning what to teach (content) and learning how to teach (methods) (Kennedy, 1999). Proponents of this philosophy suggest that teachers learn teaching methods during their own experience as a student and are therefore more likely to teach in the same manner. Using this as a theory in her research, Kennedy (1999) conducted the Teacher Education and Learning to Teach (TELT) study that examined how teacher responses to specific situations changed as a result of their teacher education program, preservice (student teaching while in college), in-service (professional development while employed as a teacher) or induction (mentor support during the first year of teaching) programs. Results indicated "that the most important phase of teacher learning is that which occurs in the context of practical experience" (Kennedy, 1999, p. 62). Kennedy asserted, "the problem facing preservice teacher education is not merely one of giving teachers a new frame of reference, but in addition of giving them the behavioral enactments that accompany these ideas" (p. 71). By doing so, preservice teachers will have the tools to identify when to enact the methods learned during their teacher education program. The TELT study reported that "the content of teacher education programs is more important than their structure" (Kennedy, 1999, p. 82). Teacher education programs, Kennedy concluded, no matter their length (4 year, 5 year, or alternative licensure), must be able to help preservice or in-service teachers enact the steps to remediate a student's learning need rather than only identify that a student has a

specific learning need.

Similarly, Ross (2014) in her dissertation cited research by Ball, Sleep, Boerst, and Bass; Feinman-Nemser; and Putnam and Borko that suggested that most of the preparation teachers receive should be completed in the context of practice. "The degree to which preparation programs provide prospective teachers with the knowledge skills, and experiences necessary to prepare students for success in the world can shape how capable and responsible they feel for student learning" (Dickstein, 2013, pp. 21-22).

Darling-Hammond et al. (2002) reviewed the perceptions of 3000 new teachers in New York City. The survey, conducted in 1998, "indicate[d] that teachers who were prepared in teacher education programs felt significantly better prepared across most dimensions of teaching than those who entered teaching through alternative programs or without preparation" (Darling-Hammond et al., 2002, p. 286). The study asked teachers to rate their perceptions of 12 components of teacher readiness: teach subject matter, help students achieve high standards, develop curriculum, use instructional strategies that promote learning, address special learning needs, choose teaching strategies for different purposes, help students become motivated, develop classroom environments, engage students in cooperative learning, plan instruction, work with parents, and overall preparation (Darling-Hammond et al., 2002, p. 292). The analysis by Darling-Hammond et al. (2002) found that "the mean ratings of graduates of teacher education programs were significantly higher than ratings of teachers without program preparation" (p. 290); two schools had "significantly higher mean ratings . . . Bank Street College and Wagner College" (p. 291); and "TFA [Teach for America] recruits felt significantly less well prepared than teacher education graduates overall on most items" (p. 291). The two programs had similar characteristics. Both

> share[d] an emphasis on extensive, carefully supervised clinical work (24 or more weeks of student teaching in settings selected to ensure modeling of desired teaching strategies) tightly linked to coursework that places significant attention on the development of content-based pedagogy. (Darling-Hammond et al., 2002, p. 293)

Menon and Saitis (2006) suggested teacher preparation programs prepared teachers for some aspects of teaching but did not prepare teachers for the administrative and organizational components of the position (p. 358). Menon and Saitis proposed teacher preparation programs include requirements for preservice teachers to observe and reflect on organizational practices. Panos (2015) concurred yet stressed that preparation programs must teach the process of reflection and provide feedback on the level and quality of the reflective process undertaken by the preservice teacher.

Ma (2005) agreed, "being reflective is one of the most important features of being a quality teacher" (p. 190) and would enhance teacher preparation for teaching. Through the process of developing an accountability program for a teacher preparation program, Ma found that through the practice of reflection,

> faculty members emerged from the assessment redesign with a greater understanding of the collective notion of what teacher candidates should know and be able to do at any given point in their programs. They also emerged from the development process with a greater appreciation of variation in how individuals develop and evaluate assessments. Through practice and collaboration, faculty members were working toward greater consensus and higher interrater reliability. (p. 194)

Many studies have been conducted on the learning occurring during the

preservice teacher training experience (Abbatte-Vaughn, 2006; Eifler & Greene, 2005; Garvis, 2009; Hoy & Woolfolk, 1990; Kukner & Orr, 2015; Martin & Carter, 2015; O'Neill & Geoghegan, 2012; Poole & Russell, 2015). Each study, while narrow in its focus, discussed the importance of explicit instruction in specific skills from which preservice teachers could benefit. For instance, Previts (2009) relayed the benefits of teaching preservice educators how to ask questions of their cooperating teacher. Without teaching the skill of asking questions explicitly, preservice teachers may lack the skills necessary to inquire about teaching methodologies, and preservice teachers may misinterpret what they see when they are observing classrooms (Santagata, Zannoni & Stigler, 2007). When taught observation skills, analysis skills, and critical reflection skills, research has identified positive relationships with teacher outcomes (Brownell et al., 2005; Previts, 2009; Santagata et al. 2007; Yost et al., 2000). Buchanan (2015) suggested that observing alone does not prepare a person for the realities of their experience. He proposed, "it may be that the highly controlled nature of professional experience offers a false mage of the complexity and demands of teaching" (Buchanan, 2015, p. 45).

Conceptual and Theoretical Frameworks

Marginalization. "To be . . . marginalized always occurs in a social context: one is always marginalized with respect to a particular group and a specific set of circumstances" (Bailey, 2000, p. 114). Fullan (1993) noted, "[teachers] with a clear sense of moral purpose often become disheartened" (p. 1) as teachers enter teaching with a hope "to make a difference in the lives of students" (p. 1) yet faced social pressures once in a school that challenged their views. Bailey (2000) reported teachers "characterized themselves as marginalized to some degree by mandated change

processes" (p. 113) that were put into place without teacher input. Jones (2009) conveyed different means of teacher marginalization: "the public marginaliz[ation of] teachers, believing that anyone can be a teachers, since all they need to do is love children" (p. 11); the internal marginalization of educators by administrators and by teacher educators; and the devaluing of teacher education programs on college and university campuses. Valli and Buese (2007) reported the "impact of state and local policies often . . . had unanticipated, and often negative, consequences for teachers' relationships with students, pedagogy, and sense of professional well-being" (abstract).

Facing the challenges of marginalization in education, Fullan (1993) recommended teacher preparation programs design programming that focuses on "the knowledge base for changing the conditions that affect teaching" (p. 9), and Darling-Hammond and Bransford (2005) recommended preparing teachers for a work environment where change is inevitable.

Constructivism. Constructivist learning occurs when "Learners create their own knowledge of the topics they study rather than having the knowledge transmitted to them by some other source" (Eggen & Kachak, 2007, p. 235). Figure 4 depicts the contrasts between traditional teaching and teaching from a constructivist perspective.

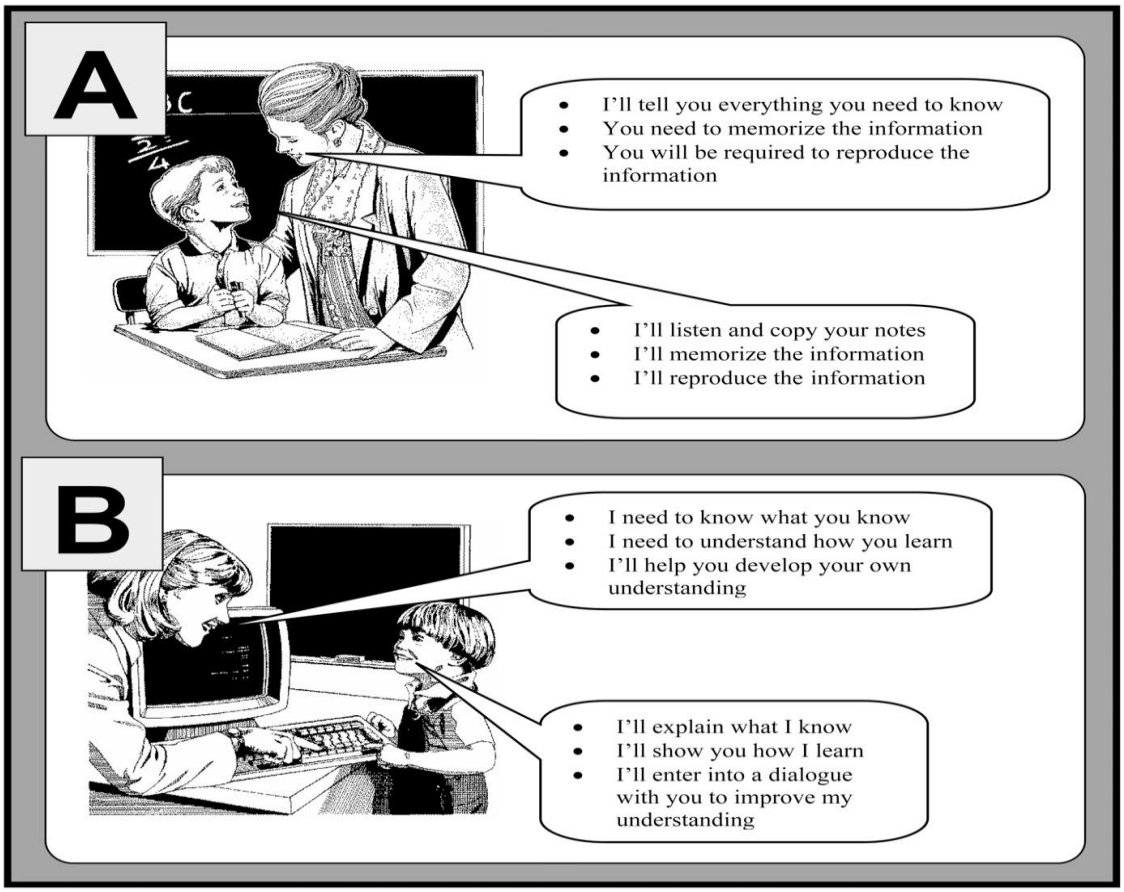

Figure 4. Traditional Learning vs. Constructivist Learning. Reprinted from "Constructivism Theory of Learning" by Effective Teacher (2010).

In recent years, teacher preparation programs have begun implementing constructivist practices in their curriculum (Carter, 2008; Darling-Hammond & McLaughlin, 2011; Lew, 2010; Licona & Cashman, 2007). Responding to the needs of the Millennial Generation, children born from 1982-2002, Carter (2008) found that preservice teachers who were taught with constructivist practices in their teacher preparation program "applied the information learned in this way to their subsequent internship experience" (p. 30). Licona and Cashman (2007) implemented constructivist practices in a teacher preparation program over a 4-year period. The researchers noted, "passing rates for secondary pre-service educators have improved significantly, and the

university's teacher preparation program is on longer in the 'accredited under review' status" (Licona & Cashman, 2007, p. 6). Along with providing time for collaboration, being proactive, hiring faculty who are innovative and who have a collaborative mindset, and including faculty in all the change effort steps, they concluded, "interdisciplinary, team, and transformative educational experiences should remain at the heart" (Licona & Cashman, 2007, p. 7) of teacher education program curriculum.

Teacher use of constructivist practices in the classroom can be measured with the Constructivist Learning Environment Survey (Lew, 2010). This survey (STELAR, 2007) identifies student perceptions of teacher practices as they relate to instruction that is relevant to the student; the use of a critical voice to question the value of the learning experience; the presence, or lack, of shared control of learning experiences; "the amount of verbal interaction that students engage in" (Lew, 2010, p. 16); and the student's attitude toward leaning (Lew, 2010). They concluded, "preparing . . . teachers who can think and who can guide their students to think is vital for a digitalized world" (Lew, 2010, p. 19).

Framework for teaching and learning. Darling-Hammond has conducted research on teacher preparation from multiple perspectives (Darling-Hammond & Sykes, 1999; Darling-Hammond, 2006; Darling-Hammond et al., 2002). Using data from a 1998 study that surveyed 3,000 teachers, Darling-Hammond et al. (2002) examined variation in teacher preparation, teacher sense of readiness for work, and their plans to remain in teaching. In this large study, the authors examined teacher perspectives through different lenses: differences by certification and differences by teacher education programs (Darling-Hammond et al., 2002). Looking at teaching as a long-term occupation, the study reported,

> teachers' views of teaching as an occupation are also strongly related to how well prepared they felt when they entered. A chi-square analysis showed that teachers who felt poorly prepared are significantly less likely to say they would choose to become a teacher if they had to do it again and significantly less likely to say they plan to remain in teaching. (Darling-Hammond et al., 2002, p. 294)

This study suggested that teachers vary in their sense of readiness based on the type of teacher preparation they receive; and that by preparing teachers well, school districts may save money. In 2000, she reported the knowledge of "teaching and learning acquired in teacher education are strongly correlated with teacher performance in the classroom" (Darling-Hammond, 2000, p. 2); and in 2006, she took her work further and examined the "knowledge that teachers may need" (Darling-Hammond, 2006, p. 303) to be successful. In this work, she composed a "Framework for Understanding Teaching and Learning" (p. 304; Figure 5) reflecting the concepts and skills teachers need to learn in a teacher preparation program (Darling-Hammond, 2006).

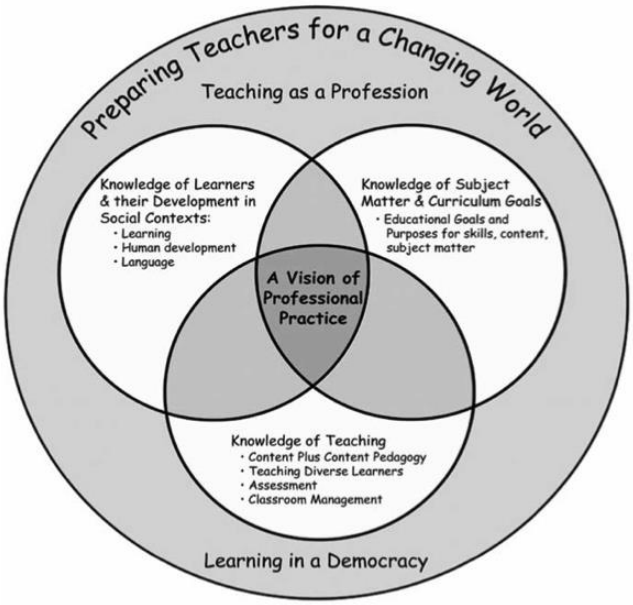

Figure 5. A Framework for Understanding Teaching and Learning. Reprinted from Constructing 21st Century Teacher Education (Darling-Hammond, 2006).

The survey items in this study were reported and analyzed in relation to the three areas of knowledge in the Framework: Knowledge of Learners, Knowledge of Subject Matter, and Knowledge of Teaching (Darling-Hammond, 2006,) as well as the type of teacher preparation teachers participated in prior to joining the school district.

Transition from Preservice Teacher to Novice Teacher

Oshrat-Fink (2014) found that a teacher's transition to the classroom is unique for each teacher based on his or her prior experiences. In a study conducted by the RAND Corporation in 1976 (Armor et al., 1976), researchers concluded that teacher perceptions about their abilities to teach were directly related to student achievement (Clark et al., 2015). Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) explained that the perception of being competent influenced the way a teacher responded to challenging situations. They concluded that a teacher who is confident about his or her ability is more likely to

be persistent and confident in making daily decisions (Tschannen-Moran et al., 1998).

Teacher Attrition

Ingersoll, Merrill, and May (2014) conducted a study of 183,300 first-year teachers using data from the Schools and Staffing Survey and Teacher Follow-Up Survey. Linking the type of preservice education a teacher received with teacher attrition, Ingersoll et al. found that the

> type of college degree, entry route, or certificate mattered little . . . what did matter was . . . [that t]hose with more training in teaching methods and pedagogy-especially practice teaching, observation of other classroom teaching and feedback on their own teaching-were far less likely to leave teaching after their first year on the job. (p. 1)

Additionally, Ingersoll et al. cited a study completed in North Carolina in which the researchers examined the relationship between teacher certification credentials and student achievement. In this study, the researchers asserted that the wide array of credentials obtained by teachers may contribute to achievement gaps (Ingersoll et al., 2014). In addition, their

> analysis also showed that these differences in education and preparation were significantly related to the degree to which teachers leave teaching. . . . What matter[ed, they concluded] was the content and substance of new teachers' preparation—especially the pedagogical preparation teachers acquired. Those with more pedagogy were far less likely to leave teaching after their first year on the job. (Ingersoll et al., 2014, p. 29)

Additionally, they identified that most math and science teachers were more likely to enter teaching after receiving a degree in math or science, rather than receiving a degree

in education, making them lateral entry teachers (Ingersoll et al., 2014). Math and science lateral entry teachers were also found to have less course work in pedagogy, less course work in learning theory, less student teaching experience, less time spent observing classrooms, and an increased rate of attrition over non-math or science teachers (Ingersoll et al., 2014). Using regression analysis, Ingersoll et al. found that "the amount of prior practice teaching that new teachers had undertaken was strongly related to their attrition" (p. 24, para. 5) and "first year teachers who took more courses in teaching methods and strategies were significantly less likely to depart" (p. 24, para. 4).

In their working paper, Boyd et al. (2009b) made a strong assertion that not all teacher attrition is negative. They found a large portion of low-performing teachers leave after their first year, which, they purport, could benefit students (Boyd et al., 2009b, p. 20). However, their research also identified that low-performing teachers often leave one school and move to another and that teachers leave low-performing schools in greater numbers than teachers in high-performing schools (Boyd et al., 2009b). They concluded, "The recruitment, selection, development, support, and retention of teachers must be linked to policies that improve outcomes for students" (Boyd et al., 2009b, p. 22).

Induction programs have been shown to have both positive and neutral impacts on teacher attrition (Kang & Berliner, 2012). Programs that had positive impacts on teachers included programs that were "highly structured, focused on professional learning and collaboration" (Kang & Berliner, 2012, p. 281).

The Teaching Fellows program, abandoned by the legislature of North Carolina, had a large, positive impact on teacher retention in that state (Cohen, 2015). From 1986 to 2015, the Teaching Fellows program enrolled over 10,000 teachers, of which over 70% were still employed after 4 years of teaching (Cohen, 2015). The Teaching Fellows

program identified high achieving high school students and offered them "enriching Teaching Fellows' traditional college education through leadership development, peer networking, extensive and meaningful in-school observation and assistance, and exposure to the theories, policies and realities that shape society, the economy, politics and culture" (Cohen, 2015, p. 5). Teacher training in this program began not in the junior year as in many colleges but from the first semester. "Hands-on experience in public-school classrooms was fundamental to the Teaching Fellows" (Cohen, 2015, p. 7) program. The Teaching Fellows were in schools from their freshman year in college. They applied a structured observation protocol and reflected with their mentors what they had observed, questioned, and found useful.

Novice Teacher Needs

In a review of the research on the transition of teachers from preservice to novice teachers, Tynjala and Heikkinen (2011) asserted that "in teachers' work, the step from education to work seems to be even more demanding in many other professions" (p. 12). They went on to state that while graduates who begin other careers are often given limited responsibilities and workload, teachers, on the other hand, receive "the full pedagogical and legal responsibility" (Tynjala & Heikkinen, 2011, p. 12) as soon as they begin work. Teachers, have been left to develop their own strategies to survive, often leading to disillusionment and decreased confidence which result in teachers leaving the profession at an alarming rate (Certo, 2006; Inman & Marlow, 2004; Tynjala & Heikkinen, 2011). Flores (2006) found that learning on the job increased teacher sense of being overwhelmed by the vast amount of duties they were responsible for and was exacerbated by a lack of support from other teachers and administrators.

Richmond, Juzwik, and Steele (2011) reported that moving from student to

teacher could be challenging. Both the preservice and novice teachers took on identities as they moved through their teacher education programs and oriented themselves with their schools (Richmond et al., 2011). As teachers learned, they created a personal narrative about "their professional work: their developing practice, the appropriation of new knowledge for teaching, their stance toward professional learning, professional relationships, and their communication" (Richmond et al., 2011, p. 1902). The research recommended that teachers be given the opportunity to be reflective and collaborate with their professors, peers, and administrators about the developing narratives in the preservice and novice teachers' minds as they undertook the role of teacher (McCarthy, 2015; Richmond et al., 2011).

In a small study in Canada ($N = 54$), graduates of a 2-year teacher education program were asked to respond to a survey regarding the challenges they experienced in their first year of teaching. Fantilli and McDougall (2009) found six challenges which new teachers faced: hiring practices, training for differentiating instruction, communication with parents, time management, absence of supportive leadership, and absence of a qualified mentor. For each of these challenges, teachers were asked to identify what support structures would have mitigated the challenges. Teachers identified the need for preservice programs to include preparation for the challenges such as time management, differentiation, and communication with parents in the training program. In addition, they identified the need for district professional development throughout the first year of teaching specifically tailored to the needs of new teachers and release time for classroom observations and collaborative planning meetings. They suggested districts alter hiring practices so time was available to plan and prepare for the classroom before the start of school and finally, that new teachers not receive the most challenging classes

(Fantilli & McDougall, 2009). Similarly, Hofstetter (2014) found that for teachers to remain in the profession, they need peer and administrative support, training in understanding school culture, training in understanding and teaching diverse learners, training in classroom management, training in how to build positive relationships, training in the completion of required paperwork, training in accessing and using curriculum resources, and training in best teaching practices (pp. 128-129).

Stages. Novice teachers move through distinct phases of development during their first few years of full-time work (Certo, 2006). Each stage is influenced by the individual teacher's experiences, concerns, and training (Stroots et al., 1998). While these phases have been named differently by a variety of researchers, similar themes emerged throughout the research (Certo, 2006; Smith, n.d.; Stroots et al., 1998; Thompson, Windschitl, & Braaten, 2013). The most common themes across the research were an initial stage of survival, the mid-year phase of disillusionment, which then leads to the final stage of rejuvenation and reflection. It is in this last stage that teachers become "concerned about pupil learning, and [begin] to see pupils as individuals with individual needs" (Stroots et al., 2008, p. 2).

Along with these stages of development, teachers face other challenges. In their meta research, Tynjala and Heikkinen (2011) identified six additional challenges: "(1) threat of unemployment, (2) inadequate knowledge and skills, (3) decreased self-efficacy and increased stress, (4) early attrition, (5) newcomers' role and position in the work community, and (6) importance of workplace learning" (p. 13). The authors concluded that different levels of support must address these challenges for novice teachers: support at the personal level, the school level, and the administrative level (Tynjala & Heikkinen, (2011).

Inman and Marlow (2004) found that teachers in their first 3 years stay in teaching when salary and job security met teacher expectations. As a novice teacher develops, they move from being centered on themselves to being centered on getting work done to being centered on student learning (Smith, n.d.). In the first 3 years of teachers' careers, they are often "eager to implement those practices and procedures about which they studied in college and are idealistic enough to believe they will change the world" (Inman & Marlow, 2004, p. 608). Thompson et al. (2013) concluded that teachers develop "forms of ambitious practice despite working in environments with standard or conservative teaching practices" (p. 609) when they have support from mentors who identify the characteristics in their mentee which lead to the implementation of ambitious practices (Pitton, 2006; Wood & Turner, 2015). Traditional teacher preparation programs, Thompson et al. purported, may not be sensitive enough to the characteristics that lead to the development of a "sophisticated repertoire of practice and a willingness to continue learning" (p. 576).

Lateral Entry Teachers

Haggard, Slostad, and Winterton (2006) found teachers who entered teaching as a second career had similar areas of concern to those of teachers who completed a university level teacher training program, although due to the financial aspects of the career change, their concerns may have been magnified. Along with the need for training in classroom and time management, Haggard et al. (2006) also noted lateral entry teachers were concerned with "adapting and accommodating curriculum in the context of the inclusive classroom" (p. 325).

A case study of 14 lateral entry teachers found that the seven educators who remained in teaching after 3 years developed a strong identity as a teacher, "reflective of

their abilities, passionate, confident and well supported as a member of a professional community" (Watters & Diezmann, 2015, p. 188); however, all participants initially reported experiencing challenges with developing a professional teaching identity. The study found that relationships were key factors in teachers remaining in the profession or leaving the profession (Watters & Diezmann, 2015). Relationships with peers were challenged as the lateral entry teachers were used to collaborating with peers. In the schools in which they taught, peers were reluctant to collaborate and treated the lateral entry teachers' knowledge of subject matter as a hindrance rather than a benefit. "Teachers [also] highlighted the importance of relationships with students arguing that it was important to know the students, their backgrounds and issues (Watters & Diezmann, 2015, p. 188).

Novice Teacher Support Programs

In a qualitative analysis using grounded-theory analysis, Roehrig, Pressley, and Talotta (2002) reviewed over five volumes of case studies of beginning teachers. In their review, they "not[ed] any challenges of first-year teaching mentioned in the case study" (Roehrig et al., p. 7). By the end of their review, they had identified over 500 challenges that first-year teachers faced. They reduced these down to 22 categories of challenges ranging from classroom discipline to relations with parents to conflicts with school culture and personal life issues. They next looked to order the 22 categories of challenges and determined there are "five superordinate categories that capture the challenges of beginning teachers" (Roehrig et al., 2002, p. 16): Self Challenges, Student Challenges, Professional Responsibility Challenges, Challenging Adults Associated with the School Setting, and Outside the School Challenges (Roehrig et al., 2002, pp. 16-18). These five categories align with three of Hall and Hord's (2015) Stages of Concern that

can be used to help address the concerns of a person moving through a major change initiative: unrelated, unconcerned, stage 0; self-concerns, informational concerns, stage 1; personal concerns, stage 2; and task concerns, management, stage 3. As new teacher support programs are put into place to provide ongoing assistance to new teachers, Hall and Hord recommended, "Interventions to facilitate change must be aligned with the concerns of those who are engaged with the change" (p. 84).

Reflecting on how to support new teachers, Villani (2002) stated, "teachers cannot be thinking about the nuances of curriculum design and instruction until they know the protocols of their school and have established that their students are engaged and ready to learn" (p. 5). Providing support to teachers, she continued to discuss the five phases that are often experienced by first-year and all teachers: anticipation, survival, disillusionment, rejuvenation, and reflection (National Association of Agricultural Educators [NAAE], 2002; Smith, n.d.; Villani, 2002, pp. 5-7). Villani outlined the pros and cons of three different types of mentoring a novice teacher: Classroom Teacher Model, Part-Time Release Model, and Full-Time Release Model. In the Classroom Teacher Model, mentors are familiar with the school site and can answer direct questions that pertain to school culture and procedures. In addition, mentors in the same site can develop a team relationship, working together to support not only their mentees but each other as well. Modeling in classrooms can also be provided when the mentor has a classroom close by. Challenges can be an expense to the district if stipends are provided; but also, there are challenges in time as often the teachers who are selected or who volunteer to be mentor teachers are overcommitted and they find it hard to find the time to observe and meet with their mentee (Villani, 2002). In the Part-Time Release Model, the ability to model instruction is still present; there is sometimes a wider, district buy-in;

some increased flexibility in scheduling; and more teachers can be served. However, the expense to the district is ongoing, mentors tend to receive more mentees that they can provide services for, and scheduled release time is hard to schedule (Villani, 2002). In the Full-Time Release Model, the schedule is set by the mentor, the mentor is solely focused on beginning teacher needs, and the mentor in that position has likely provided support to others in his or her career prior to taking on a full-time role. However, the likelihood for overburdening the mentor teacher continues; other teachers may resent a specialist coming in; and buy-in may be lower, depending on how the district communicates the plan (Villani, 2002).

Sanderson-Hobbs (2015) concluded novice teachers benefitted from a dedicated teaching and learning coach whose role was to support novice teachers in developing leadership skills, developing a respectful environment for students, knowing the content they taught, facilitating learning for students, and reflecting on their practice; however, the study also identified that time commitments were a constraint to the overall effectiveness of the teaching and learning coach.

In response to the increasing numbers of induction programs for novice teachers being implemented in school districts, Smith and Ingersoll (2004) examined data from the National Center for Education Statistics to identify if induction programs were related in some way to teacher attrition. Their research concluded that when mentors were provided for novice teachers who taught in the same subject field, the novice teachers were less likely to leave the profession after their first year (Smith & Ingersoll, 2004). In addition, the data showed that teachers who had no induction program had an increased likelihood of leaving as compared with teachers who were involved with an induction program that was paired with regular teacher collaboration and those that also provided

teachers with extra resources (Smith & Ingersoll, 2004).

Pathways to Teacher Licensure in North Carolina

In 2016, there were three different pathways to teacher certification in North Carolina (NCDPI, 2014). First, candidates completing traditional licensure complete a 4- or 5-year college degree education, taking courses in subject matter, pedagogy, and learning theory. Traditional licensure candidates also participate in a variety of observation, practicum, and student teaching experiences. These experiences differ based on the college or university program the candidate attends. Traditional licensure candidates complete the Praxis exam in the area in which they would like to teach; and, if they are seeking an elementary or special educators license, they must also complete Pearson Test for North Carolina: Foundations of Reading and General Curriculum (NCDPI, 2014).

The second pathway to teacher licensure in North Carolina is through the transfer of a license from another state. In this pathway, teachers with 3 years of experience or greater and are deemed "Highly Qualified" (NCDPI, 2014, para. 9) or have National Board Certification may qualify for a Standard Professional 2 teaching license.

The third pathway, lateral entry, is a conglomeration of entrance pathways into teaching. Teachers who seek licensure through lateral entry must hold a bachelor's degree from an accredited university with either a relevant degree, or 5 years of experience that is considered relevant by the local education agency, or pass either the Praxis exam or the Core Academic Skills for Educators exam (NCDPI, 2014). Lateral entry programs provide future teachers with an avenue to teacher certification using their college training and experience. Between 20% and 30% of new teachers are trained through alternative licensure options in the United States annually (Clark et al., 2015). In

North Carolina, several major universities have lateral entry programs for people who wish to make a mid-career change. In addition, some school systems and other grant-funded programs have also instituted programs of support for lateral entry teachers (Cohen, 2015; Greenberg, Walsh, & McKee, 2015; North Carolina New Schools, 2016; Putman, Greenberg, & Walsh, 2016).

Chapter 2 Summary

This chapter reviewed the literature relating to the history of teacher preparation, perspectives of teacher readiness for the classroom, how teachers are prepared through university and lateral entry programs, the transition process that occurs for new teachers, and novice teacher support programs. Chapter 3 reviews the purpose of the study, the research design and rationale, the research questions and hypothesis, and the methodology for the study.

Chapter 3: Methodology

Introduction

Mixed-methods research. Since the turn of the century, mixed-methods research has become increasingly prominent in social sciences. It can provide a more thorough understanding of the research question and provide triangulation of data, increasing the validity of the responses, and decreasing some of the limitations of a singular quantitative or qualitative study (Creswell, 2014, pp. 216-216). The use of a mixed-methods approach provided the researcher with a deeper level of understanding of the participants' perceptions of readiness for the teaching profession.

This QUAN → qual research design first identified teachers' perceptions of readiness as defined by NCATE (2014a). NCATE requires accredited programs to prove that their instructional programs "prepare teachers with deep knowledge of the content areas they teach and with the solid understanding of learning, teaching, curriculum, [and] assessment" (Darling-Hammond, 2000, p. 2). Darling-Hammond (2006) later constructed an intersecting diagram to represent the areas of knowledge that comprise a "Framework for Understanding Teaching and Learning" (p. 304). The three components of this framework, "Knowledge of Learners and their Development in Social Contexts, Knowledge of Subject Matter and Curriculum Goals, and Knowledge of Teaching" (Darling-Hammond, 2006, p. 304) are the basic skills necessary for a 21st century educator and provided the theoretical construct for the analysis of the survey items.

Figure 6 demonstrates how the quasi-experimental research method was employed "to explain whether a specific variable is predictive of another variable" (Butin, 2010, p. 85).

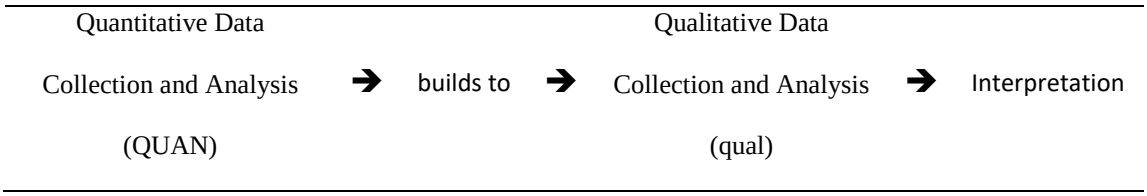

Figure 6. Exploratory Sequential Mixed-Methods Design Process. Adapted from Creswell (2014).

This study addressed the impact of teacher preparation on novice teachers' perceived readiness for the classroom. An explanatory sequential mixed-methods design was used involving two collections of quantitative data followed by an exploratory focus group (QUAN → qual).

In order to test whether the type of teacher preparation program was related to a teacher's perceived sense of readiness for teaching, quantitative survey data were collected at two different time intervals from the teachers identified as Beginning Teacher 1. Aspects of teacher preparation including instructional planning, classroom management, managing differences, monitoring needs and progress, evaluating and modifying instruction, communicating with learners, teaching repertoire, learner engagement, and understanding of subject matter (Darling-Hammond, 2000) were also assessed in the survey.

The second qualitative phase was conducted as a follow-up to the initial survey to explore changes in perception over time. During this phase, an exploratory follow-up was conducted in which a small focus group chosen from the survey participants was convened to explore issues identified in the survey that pertained to supports teachers needed in order to increase teacher retention. The focus group was chosen at random by assigning a number to the names of teachers who were identified as Beginning Teacher 1.

Then, using a random number generator, participant names were matched with the number selected by the program. When a participant elected not to participate in the focus group, another number from the random number generator was identified and the teacher who was assigned that number was invited to participate in the focus group. This process continued until an eight- to 10-member focus group was formed. The focus group was held in a professional development classroom in the county where the study was conducted.

Research Questions and Hypothesis

Two research questions were developed for this study. The first question sought to understand how teachers' perceptions of readiness to teach changed during their first year of teaching (QUAN). The second question addressed what could be done to assist teachers in being better prepared for teaching (qual).

1. How does novice teacher perceived readiness for teaching change during the first year? (Quantitative)
    a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach?
    b. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of learners and their development in social contexts?
    c. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of subject matter and curriculum goals?
    d. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in knowledge of teaching?

2. What support structures contribute to novice teachers' perceptions of job readiness? (Qualitative)

The hypothesis for this work was, "Teachers with traditional teacher certification will report an increase in the perception of readiness to teach over lateral entry teachers." The null hypothesis is that there is not a significant difference between teacher's report of readiness to teach and the type of teacher preparation program.

Independent and dependent variables. The independent variable in the quantitative component of the study was teacher perception of readiness for teaching. The dependent variables in this study were teachers' perceptions of readiness in the areas of their "knowledge of learners and their development in social contexts; knowledge of subject matter and curriculum goals, and knowledge of teaching" (Darling-Hammond, 2006, p. 203).

Overview of Chapter 3

The following pages in this chapter detail the research design and rationale; the role of the researcher; and the specific methods utilized to conduct the study including the selection of participants, the instrument used for both the quantitative and qualitative components of the study, the pilot-testing plan, and the data analysis plan for both the qualitative and quantitative data. The chapter also contains information on how the threats to internal and external validity were addressed; issues of trustworthiness and ethical considerations; and finally, a summary of the overall chapter.

Setting and Background

The study was conducted in one of the four largest school districts in a state in the southeast. The setting provided an excellent opportunity for a large sample group of first-year teachers relative to first-year teachers in other counties of the state. The district

serves approximately 72,000 students in 126 schools. Of the almost 5,000 teachers, approximately 300 were first-year teachers in 2015 (Induction Coach, personal communication, June 6, 2016).

The school system trained both novice teachers and mentor teachers in the six-stage developmental model shown in Figure 7 (NAAE, 2002; Smith, n.d.; Villani, 2002).

Figure 7. Phases of First-Year Teacher Development (NAAE, 2002).

During mentor training, teachers were asked to reflect on each of these stages and identify what the stage looked like in their own experience. It was acknowledged that supporting teachers during these different phases can be challenging; and yet, "it is important for beginning teachers to have colleagues with whom they can share ideas, make plans, and attempt to solve problems" (Inman & Marlow, 2004, p. 610) to increase the likelihood that they will remain in the profession (Fantilli & McDougall, 2009).

Role of the Researcher

The researcher held both internal and external roles in this study. As the researcher was part of the broader committee that developed the questions for the overall

new teacher survey, the researcher worked internally; however, as the researcher's current position did not have influence on any recommendations made by the outcome of this research, the researcher also held an external role.

In addition, for the components of this study, the researcher worked closely with the Executive Director of Accountability and Research, the Executive Director of Human Resources, and the Executive Director of Induction and Success on the survey development. The researcher also worked closely with the Executive Director of Accountability and Research on the statistical analysis of archived and new data.

Methodology

Participant selection. All first-year teachers in the school system were invited to complete an initial survey at the beginning of the 2016-2017 school year. A second survey was sent to the respondents of the first survey and additional respondents who joined the district after the start of the 2016-2017 school year and were identified by the district as Beginning Teacher 1. This group was a clustered, convenience sample of the population of new teachers in the researcher's local school district. When the data were analyzed, stratification (Creswell, 2014; Stratification variable, n.d.) occurred for teachers who completed traditional licensure programs; for teachers who entered teaching using an alternative licensure approach; and for elementary, middle, and high school level teachers where the sample sizes were large enough ($n > 10$).

Sample size. In August 2016, the school system had 354 beginning teachers and 162 lateral entry teachers (Induction Coach, personal communication, October 26, 2016).

Instrumentation. As surveys quantify opinions of a group of individuals (Brace, 2008; Creswell, 2014; Iarossi, 2006; Phillips, Aaron, & Phillips, 2013; Suh, 2015), the use of surveys in this research captured pertinent information for the study in a time

sensitive and economic manner (Brace, 2008; Harrison, 2007).

History of survey design. When the researcher originally approached the Director of Research and Evaluation about this proposed study, the Director indicated that the researcher's idea was one that the district had discussed completing previously but had not been set as a priority. As a result of the conversation, the Executive Director of Research and Evaluation put together a team that included the Executive Director of Professional Development, the Executive Director of Human Resources, a program specialist, and this researcher to develop a broader district survey that addressed the focus of this study as well as other areas the district planned to explore (EDRA, personal communication, July 7, 2016; Appendix A). The collaborative effort for this survey design took place in several face-to-face meetings and through electronic communication.

Three members of the team – the Executive Director of Human Resources, the Executive Director of Research and Evaluation, and this researcher – met on July 20, 2016. At that meeting, the Executive Director of Human Resources and this researcher presented items to be included in the survey based on research conducted by Darling-Hammond et al. (2002) and Tschannen-Moran et al. (1998). Darling-Hammond et al.'s (2002) study reviewed teachers' perceptions of readiness to teach based on the teacher preparation program teachers had attended. To identify the teachers' perceptions of readiness to teach, respondents in the study answered questions with the stem, *I am confident in*. Tschannen-Moran et al. (1998) noted, "self-efficacy has to do with self-perception of confidence rather than actual level of confidence" (p. 210). In a subsequent meeting with the full team on August 16, 2016, the team discussed and clarified all survey items, after discussing the aforementioned research, to confirm the survey measured what it was intended to measure and meant the same to all respondents

(Harrison, 2007); decided on the demographic information the team wanted to collect as part of the survey; and discussed the order of the survey items to identify if an item might provoke a specific answer on a subsequent item (Harrison, 2007; Suh, 2015; Thayer-Hart, Dykema, Elver, Schaeffer, & Stevenson, 2010). Following the meeting, the Program Specialist sent a draft version of the survey for all team members to review. The Executive Directors shared the initial survey with the Assistant Superintendent to get her approval prior to the final distribution to all the new teachers.

Pilot-testing of instrument development. A pilot test for the initial survey was conducted August 26, 2016 by this researcher. In the pilot test, three second-year teachers were included: one lateral entry teacher, one a graduate of the last Teaching Fellows cohort, and one who completed his training through a traditional university pathway. The demographic makeup of this pilot test included an African-American male and two Caucasian females. Pilot survey participants found that the survey took a maximum of 10 minutes to complete. In addition, the participants noted one item, asking about the survey participants' internship experiences, was not clear. The participants recommended that the question be split into three separate groups: the length of time in a practicum experience, the length of time in an internship experience, and the length of time in a student teaching experience (Appendix A, Question 8; Appendix C). Based on the aforementioned feedback by the participants, changes were made to the original survey prior to the survey on August 31, 2016.

The same pilot test group was invited to convene for the second survey and for the review of the focus group questions. The second pilot test checked for response bias in addition to addressing issues of validity and reliability. All respondents in the second pilot test indicated that the items were clear, understandable, and pertinent to their roles.

No further recommendations for changes to the survey items were made. The second pilot test took the respondents 15 minutes to complete. Neither set of pilot test responses was included in the final study.

One way to address socially acceptable response bias is to control for it (Paulhus, 1991); and while response bias is inherent in surveys (Creswell, 2014), Peer and Gamliel (2011) found that online surveys have less response bias than paper pencil questionnaires. Therefore, by administering an online survey rather than a paper pencil survey, one control for response bias was put in place.

Initial survey distribution. Subsequent to the pilot test and as a result of the need to get this study out as close to the start of the school year as possible, participants were invited to complete the survey by the Executive Director of Human Resources and the Executive Director of Professional Development. In their email message, the directors included a letter indicating that the survey was optional, that the results of the survey would be used to provide additional support for new teachers, and that some of the results would be used for research purposes (Appendix D).

Follow-up survey construction. The team met again in December 2016 to develop the second follow-up survey using recommendations provided to this researcher from the Gardner-Webb Dissertation Committee. Similarly, working with the Executive Director of Professional Development and two of the New Teacher Coaches in the district where this research was conducted, focus group and interview questions were developed that addressed the needs identified by the new teachers in the first two surveys.

The follow-up survey (Appendix D) included the same survey items as the fall survey, with a few exceptions. To facilitate the stratification process, the survey included items that asked participants if they completed the fall survey and if they were a Teach

for America teacher. As the requirements for being a Teach for America teacher are different than traditionally certified teachers and lateral entry teachers, the team decided this delineation was important (New Teacher Survey Team Meeting, personal communication, March 3, 2017). In addition, rather than asking for the type of support teachers needed, items 28-30 were adapted to reflect the type of support the teachers received from their mentor, administrator, and instructional support staff. The participants were also asked to provide input on the trainings the district required for new teachers as well as to identify areas where the respondents felt they still needed support (TNTP, 2012). Finally, the respondents were asked to identify if they planned to remain in teaching and what their principal could do to keep them at their current school (TNTP, 2012).

Data collection. The data collection process for the qualitative and quantitative data is explained separately below.

Quantitative. Two survey collection periods, each using the school system's email exchange system, made this study longitudinal (Creswell, 2014). The first survey collection period was during the first 3 months of the 2016-2017 school year. The second collection period took place approximately six months after the first collection period. As the subjects all had a school system email address and as the school system provided approval for the study, use of the school system's email exchange to send links to the survey was an efficient, cost effective delivery method. Receipt of the survey link, via the school system exchange, served as one measure that increased survey completion; however, initial response to both surveys was limited, and the new teacher coaches sent a follow-up email to new teachers inviting them to partake in the survey in order to increase participation.

Qualitative. Six open-ended items were included in the second survey. Upon receipt of the survey responses, this researcher worked with the program specialist and two other members of the Data and Evaluation Department in the district where the research took place to code and triangulate the data.

In addition, after the results of the quantitative data were analyzed, a focus group was convened. It consisted of 10 participants: four traditionally certified teachers and six lateral entry teachers. The focus group provided the researcher with additional information about specific themes that emerged from the quantitative data (Creswell, 2014). The focus group provided clarification to research questions and further insight into how new teachers could be supported during their first year (Creswell, 2014). Focus group participants were informed that their responses, while part of a research study, would not be attributed to them in any way in the published document.

Participants were invited to the focus group through a random selection process. First, numbers were attributed to all first year beginning teachers in the district. A set of numbers was generated for all teachers who entered teaching through the lateral entry pathway, and a second set of numbers was generated for teachers entering teaching through traditional certification. Next, a random number generator was used to select teachers from each group. Once 10 numbers were selected, the teachers aligned with those numbers were invited to participate in the focus group. The focus group was voluntary. Therefore, if a selected individual chose not to participate, the process of selecting a number at random and inviting the participant continued until the group of 10 participants was achieved. At the conclusion of this process, six lateral entry teachers agreed to participate and four traditionally certified teachers agreed to participate.

Questions for the focus group fell into three categories: engagement questions,

exploration questions, and exit questions (Eliot & Associates, 2005). As the questions for the focus group were dependent on the quantitative data analysis, the questions were not developed until after the analysis of the quantitative data. When a pattern emerged, an open-ended question was developed to further explore the theme. For instance, from the quantitative responses on the spring survey question about mentors, *how helpful was the support you received from your mentor*, as well as the qualitative responses, *please explain your question*, beginning teachers indicated a desire for their mentors to be experienced in the areas the mentee was teaching. As such, the following questions were asked during the focus group: "Was your mentor familiar with your content area? In your experience, is it possible to have an effective mentor who is not within your content area? Tell me about that."

Strategies used during the focus group to elicit high-quality responses were active listening, open-ended questioning, and open-ended follow-up questions to explore an issue raised by a participant further (Seidman, 1998). While planned, the following strategies were not needed as the participants shared openly: asking participants to tell a story, suggesting that the participant talk to the researcher as if the researcher was someone else, or use concrete details (Seidman, 1998).

Data analysis. The data analysis process for the quantitative and qualitative data is explained separately below.

Quantitative. The quantitative results included an itemization of the quantity of surveys distributed, the quantity of surveys returned, the methods used to qualify if response bias was present, descriptive statistics for all variables, chi-square analyses, and two-way *t*-test analysis.

Table 1 provides an alignment of the research questions, research methods, and

survey items. The first step in the alignment process was to define each of the three knowledge constructs in the theoretical framework: Knowledge of Learners, Knowledge of Subject Matter, and Knowledge of Teaching. Knowledge of Learners therefore was defined as knowing "how students learn, and what various students need if they are to learn more effectively" (Darling-Hammond, 2006, p. 303). Knowledge of Subject Matter was defined as, "understanding how to construct purposeful curriculum . . . [by] incorporating subject matter goals, knowledge of learning and an appreciation for children's development and needs" (Darling-Hammond, 2006, p. 303). Knowledge of Teaching was defined as "knowledge and skills for assessing pupil learning, and . . .the knowledge to know when to use different strategies for different purposes" (Darling-Hammond, 2006, p. 304).

Table 1

Alignment of Research Methods with Research Questions

Research Question	Tools/Instrument
1. How does novice teacher perceived readiness for teaching change during their first year? (Quantitative)	
a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach?	Fall Survey items 5, 6, 11 Spring Survey items 4, 5, 6, 7
b. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of learners and their development in social contexts?	Fall Survey items 5, 6, 16, 17, 18, 25 Spring Survey items 4, 5, 6, 12, 13, 14, 21
c. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of subject matter and curriculum goals?	Fall Survey items 5, 6, 12, 14, 18, 26, 27 Spring Survey items 4, 5, 6, 8, 10, 14, 22, 24
d. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of teaching?	Fall Survey items 5, 6, 13, 15, 19, 20, 21, 22, 23, 24 Spring Survey items 4, 5, 6, 9, 11,15, 16, 17, 18, 19, 20, 21
2. What support structures contribute to novice teachers' perceptions of job readiness?	Focus Group & Interviews

The second step was to identify which item on the survey aligned with each construct. For each item, the researcher asked, "Which construct aligns with this item; why; and could the item align with more than one construct?"

For the knowledge of learners and their development in social contexts, the following items were aligned with the construct: "I am confident in my ability to engage students"; "I am confident in my ability to differentiate instruction"; "I am confident in my ability to teach both high- and low-performing students"; as engagement, differentiation, and teaching high- and low- performing students depends on a teacher's knowledge of what students need if they are to be more effective. In addition, "I am

confident in my ability to communicate with parents" was aligned with this construct as two of the key skills necessary to hold a parent conference, explaining to a parent how a student is learning in a particular class and explaining the child's current stage of development, are integral components of this construct (Darling-Hammond, 2006; Darling-Hammond & Bransford, 2005).

Several items overlapped categories. For instance, "I am confident in my ability to contribute in a team collaborative meeting" could be attributed to all three constructs as the discussion in a team collaborative meeting could address any one of the three constructs. When the items did not have a clear alignment, this researcher further reviewed Darling-Hammond and Bransford's (2005) as well as Darling-Hammond's (2006) explanation of each construct to identify where the construct was referenced in the author's work. For this question, Darling-Hammond (2006) addressed teacher collaboration in conjunction with knowledge of teaching; and therefore, the item was aligned with the construct knowledge of teaching. An additional item that was determined to overlap between knowledge of learners and knowledge of subject matter was, "I am confident in my ability to teach both high- and low-performing students." However, using the research, it was determined to align with knowledge of subject matter as the construct includes the "appreciation for children's developmental needs" (Darling-Hammond, 2006, p. 303).

For the knowledge of subject matter and curriculum goals, the following items were aligned with the construct: "I am confident in my ability to teach my grade level or content/subject areas"; "I am confident in my ability to plan lessons that align with content standards"; "I am confident in my ability to teach"; "I am confident in my ability to work with students with behavioral or mental health concerns"; and "I am confident in

my ability to work with students who have learning disabilities." Each of these items addresses a teacher's knowledge of subject matter or knowledge of learning or requires a knowledge of a child's developmental level and subsequent needs (Darling-Hammond, 2006).

Finally, for knowledge of teaching, the remaining items aligned with the construct: "I am confident in my ability to manage student behavior"; "I am confident in my ability to plan lessons that are culturally responsive"; "I am confident in my ability to teach students experiencing poverty"; "I am confident in my ability to teach students who are racially of culturally different from me"; "I am confident in my ability to use formative assessments"; "I am confident in my ability to analyze data from student assessments"; and "I am confident in my ability to adapt instruction based on data analysis" as each question relates to either "classroom management . . . assessing pupil learning" (Darling-Hammond, 2006, p. 304), teaching diverse learners, or knowing when to "use a different strategy for a different purpose" (Darling-Hammond, 2006, p. 304).

Chi-square analysis. A chi-square analysis was performed on teachers' overall report of confidence as well as their overall report of confidence on each of the three constructs: knowledge of learners and their development in social contexts, knowledge of subject matter and curriculum goals, and knowledge of teaching to determine if there was an association between teacher confidence level for teaching and teachers who enter teaching through the traditional training route and for teachers who enter teaching through the lateral entry route (Creswell, 2014; EDRA, personal communication, October 4, 2016; Laerd Statistics, 2016; Soper, 2017). The chi-square analysis was used as there is not an assumption of normal results, meaning the overall scores may be positively or negatively skewed.

The chi-square analysis was conducted on the archived survey data and again on the follow-up survey data. This analysis determines if the data gathered is dependent on the type of teacher preparation (Gravetter & Wallanau, 2013; S. Pritchard, personal communication, October 7, 2016; Urdan, 2010). Teacher overall sense of confidence as reported in the survey as well as teacher sense of confidence as it relates to each of the three knowledge constructs were also calculated (Table 1).

The null hypothesis for the chi-square analysis was there is no relationship between the type of teacher preparation and a teacher's self-reported level of being confident to teach. In summary, the chi-square analysis will identify the frequency distribution of teachers who are traditionally certified/lateral entry who report being not at all confident, somewhat confident, confident, or very confident – looking to see if the dependent variable can predict the level of the independent variable. Chapter 4 includes the results of the chi-square analysis in a table format as well as through a written summary. The written summary includes a statement that demonstrates whether the chi-square results demonstrated a significant or nonsignificant χ^2 value.

Two-sample t test. A second mean rating of confidence was established using data from items 11-27 on the fall survey and items 7-23 on the spring survey to determine if there was a change in teachers' perceptions of confidence over time. Using a two-sample *t* test, an analysis was completed to explore the relationship between traditionally certified teachers and lateral entry teachers on items 11-27 on the fall and spring surveys. Chapter 4 includes the descriptive statistics and a statement that demonstrates whether the *t* test(s) results demonstrated a significant or nonsignificant value.

The two-sample *t* test compares the level of confidence teachers reported at the beginning of their teaching career and after 6 months of teaching, looking to see if there

was a change in confidence level for traditionally certified teachers, lateral entry teachers, or both from the fall to the spring of the teachers' first year of teaching. A graphic representation of the data along with a written summary explaining the two-sample *t*-test results will be provided in the final analysis.

Finally, a summary of the overall results will be included.

Qualitative. The focus group responses were analyzed using Grounded Theory (Creswell, 2014). First, all responses were read without identifying themes. Next, the material was reread and themes were identified as the researcher reviewed the responses (Creswell, 2014). After all responses were coded, the responses were validated through investigator triangulation (Guion, Diehl, & McDonald, n.d.). Individual researchers each read over the focus group responses using the aforementioned process, then the results from each researcher were compared to determine if similar themes emerged. Additionally, Theory Triangulation (Guion et al., n.d.) was used to identify if professionals from different departments in a county school system (Human Resources, Data and Evaluation, and Professional Development) identified the same themes in the responses. Subsequently, the researcher identified if a connection occurred between the identified themes and the three areas of knowledge: Knowledge of Learners, Knowledge of Subject Matter, and Knowledge of Teaching identified in the theoretical framework for this research (Darling-Hammond, 2006).

Chapter 4 includes a rich description of the selection process, a rich description of the focus group participants including demographic information as well as the certification pathway, and a rich description of the process used to develop the focus group questions based on the quantitative results. In addition, results include the process used to record participant responses, a thorough explanation of the process used to code

responses and triangulate the data, and a potential theory generated from the data (Creswell, 2014) as well as an overall summary of the results.

Both research processes were then united in a conclusion so that "extensive description [of the results, including] statistical significance testing, confidence intervals and effect sizes" (Creswell, 2014, p.165) were discussed in conjunction with the relationship of the results to the research questions and implications for the results.

Threats to Validity

Ensuring reliability and validity of survey responses is a demanding task (Creswell, 2014; Marra & Bogue, 2006; Scriven, 1991); however, writing survey items that are consistent, yield the intended answers, and answer the research questions (Creswell, 2014; Marra & Bogue, 2006; Scriven, 1991) is vital to measure the internal consistency of the data collected. Therefore, through working with representatives from the District Data and Evaluation Department, the Human Resources Department, and the Induction and Success Department and by conducting pilot tests for each of the surveys distributed to new teachers, the survey items were successfully validated.

Issues of Trustworthiness

Trust is an essential component in any workplace. Therefore, asking novice teachers to complete a survey in which they reported information about their teaching preparation program and the type of support they needed in their first year of teaching was not taken lightly. To establish trust, the Induction and Success Department, as part of a district new teacher study, distributed the survey. The coaches in the Induction and Success Department had a nonevaluative relationship with teachers identified as Beginning Teacher 1 in the district. The teachers were informed that some items on the survey would be in a dissertation in which the research sought to identify the type of

support structures novice teachers identify as needs during their first year in the classroom. In addition, the letter sent to the participants identified that all items would be used by the district in an effort to improve their support of new teachers across the district.

Ethical procedures. Ethical procedures studied while writing this dissertation include reviewing the code of ethics for teachers (North Carolina State Board of Education, 1998), how to complete the dissertation proposal, how to obtain a date for the dissertation approval, and subsequently a date for approval from the Institutional Review Board (IRB) at Gardner-Webb University. In addition, this researcher completed the Collaborative Institutional Training Initiative (CITI) certification in January 2016.

Chapter 3 Summary

This chapter reviewed the setting in which the study took place, the research design and rationale, and the study methodology including how the participants were selected, how the instruments used for both the quantitative and qualitative components of the study were chosen, how pilot testing was conducted, and how data were analyzed upon receipt of the results. Also reviewed are the identified threats to internal and external validity, issues of trustworthiness, and ethical considerations for this mixed-methods research.

Chapter 4: Results

Introduction

Preparing entry-level educators for teaching in the 21st century requires careful consideration of the diverse needs of teachers entering teaching both through the traditional teacher education pathway and the lateral entry pathway. With novice teachers leaving the profession at an approximate 3% higher rate than experienced teachers (BEST NC, 2015; Boyer & Gillespie, n.d.; Corcoran, 2007; Darling-Hammond, 2009; Darling-Hammond & Ducommun, 2011; Gray & Taie, 2015; Hinchcliffe, 2016; Shockley et al., 2006), identifying and analyzing the needs of novice teachers in their first year can promote student achievement and decrease school systems' cost of attrition (Barnes et al., 2008).

Overview of Chapter 4

This chapter presents an overall summary of the data collected in the fall and spring surveys as well as the results from the focus group. First, the research questions that guided the data analysis are provided. Next, the data collection process is described, followed by the presentation of data for each research question. The data provided includes pertinent results from the fall 2016 survey, the spring 2017 survey, and the focus group. For each research question, the tool utilized to access the data, the data collection process, and the results obtained are presented. In cases where the data indicated a need for additional examination, the resulting data are also included.

Research Questions

The research questions that guided the study are identified below.

1. How does novice teacher perceived readiness for teaching change during the first year? (Quantitative)

a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach?
b. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of learners and their development in social contexts?
c. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of subject matter and curriculum goals?
d. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of teaching?

2. What support structures contribute to novice teachers' perceptions of job readiness? (Qualitative)

Data Collection

For each research question, the quantitative data gathered from the fall and spring surveys is presented along with any pertinent qualitative data from the spring survey and focus group. Data for Research Question 1 were split into four subgroups: teachers' overall sense of readiness; teachers' sense of readiness relating to the knowledge of learners and their development in social contexts; teachers' sense of readiness relating to the knowledge of subject matter and curriculum goals; and teachers' sense of readiness relating to the knowledge of teaching. The quantitative data for each of these subgroups are presented relative to the respondents' path to certification. In addition, chi-square analysis and two-sample *t*-test analysis are presented for each subgroup.

The data from the analysis of qualitative responses to spring survey items and focus group responses were used to answer Research Question 2.

Fall survey. The 2016 fall survey, developed by the New Teacher Survey Team (Appendix A), was distributed through the school system's email server to 174 teachers identified as first-year teachers. Teachers were identified as first year using the criteria established by NCDPI (New Teacher Survey Team, personal communication, July 20, 2016). It is important to note that when teachers responded to this survey, teachers had been in the classroom for at least 2 weeks.

Fall data collection process. Initially, teachers were asked to respond to the survey within 2 weeks of receipt; however, the team gathering the data alerted the research team that only 17 responses had been received after 2 weeks. At that time, the research team asked the Induction and Success Coaches to email first-year teachers reminding them that that the survey had been distributed a few weeks earlier and inviting the new teachers to respond. The follow-up email yielded an increased response rate of 130 additional surveys, bringing the response rate for the fall survey to 84% (N = 147), providing a relevant sample population for this study (Creswell, 2014; Urdan, 2010).

Upon receipt of the responses, a data analyst in the district office compiled the data and began the analysis process. The data analyst developed a preliminary report that was presented to the New Teacher Survey Committee on January 26, 2017. After receiving permission from the school district internal review board to utilize the data in this report, this researcher was provided access to the raw data from the Fall 2016 New Teacher Survey Preliminary Findings Report (2017). The largest portion of respondents from the fall survey taught in elementary school (n = 74), received a bachelor's degree (n = 115), and completed a traditional undergraduate teacher preparation program (n = 75). Table 2 and Table 3 depict the teaching level and education level of the fall respondents respectively.

Table 2

School Level Survey Respondents – Fall

Grade Level	# of Teachers (*N* = 147)	Percent
Elementary	74	50.3%
Middle	30	20.4%
High	43	29.3%

Note. Adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

As indicted in Table 3, most of the survey respondents held either a Bachelor's or Master's degree, and a small percentage had earned a Doctorate.

Table 3

Highest Degree Obtained – Fall

Highest Degree Obtained	# of Teachers (*N* = 147)	Percent
Associates	1	0.7%
Bachelors	115	78.2%
Masters	26	17.7%
Doctorate	4	2.7%
No response	1	0.7%

Note. Adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey. This researcher brought to the attention of the research team that the number of participants in the fall survey did not seem to reflect the total number of new teachers in the district. The team reviewed the complete list of new teachers identified through Human Resources and the list of new teachers presented to the Induction and Success Department. It was determined that some of the first-year teachers were not given the fall survey. In response to this realization, the team confirmed that all teachers given the fall survey were first-year teachers. Next, the team checked to make sure that the spring email distribution list included the entire list of all first-year teachers

(New Teacher Survey Team, personal communication, January 26, 2017). The team then chose to invite the full list of first-year teachers to complete the spring survey. As this increased the sample size, an item was added at the beginning of the survey to determine if the teachers had completed the fall survey. This additional item helped to facilitate statistical analysis. Of the 199 respondents to the spring survey, 96 indicated they had completed the previous survey in the fall.

Spring data collection process. The spring survey (Appendix D) was distributed on March 27, 2016 through the school system's email server to 426 teachers identified as first-year teachers using the criteria identified by NCDPI. Participants were asked to complete the survey within 2 weeks, or by April 8, 2016; however, on April 18, 2017, the response rate was only 13% (New Teacher Survey Team, personal communication, April 18, 2017). Similar to the fall survey, induction coaches were asked to follow up with new teachers in their schools. By June 1, 2017, the number of responses was 198, yielding a 47% response rate; and the district released the data files to this researcher to complete this study. Items on the survey yielded both quantitative and qualitative data. Table 4 depicts the teaching level of the spring respondents.

Table 4

School Level Survey Respondents – Spring

Grade Level	# of Teachers (N = 198)	Percent
Elementary	81	40.9%
Middle	44	22.2%
High	69	34.9%
Did not answer	4	2.0%

Table 5 depicts the overall number of respondents, based on their path to certification, on the fall and spring surveys. The data team hypothesized that the teachers

who responded “non-certification program” or “no response” were likely to be the group of teachers in the Teach for America Program or ROTC teachers, as the pathways for these teachers did not require the same certification process as either traditionally certified teachers or lateral entry teachers.

Table 5

Path to Certification - Fall/Spring

	Fall		Spring	
Path to Certification	# of Teachers (*N* = 147)	Percent	# of Teachers (*N* = 198)	Percent
Traditional undergraduate teacher preparation program	75	51.00%	89	45.00%
Lateral Entry Program	50	34.00%	97	49.00%
Non-certification program	10	6.80%	9	4.60%
No response	12	8.20%	3	1.50%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Collective Response: Fall/Spring Surveys

As noted in Chapter 3, items 12-27 on the fall survey and items 8-23 on the spring survey asked respondents to rate their perception of readiness to teach one of 16 teacher tasks aligned to Darling-Hammond’s (2006) Framework for Teaching and Learning, using the question stem, *I am confident in my ability to . . .* , aligned with Darling-Hammond et al.’s (2002) study of a similar focus. These results were reviewed in two ways: first as collective responses to identify similarities and differences between all responses, then as grouped responses aligned with each of the constructs *Knowledge of Learners* (Research Question 1b); *Knowledge of Subject Matter* (Research Question 1c); and *Knowledge of Teacher*s (Research Question 1d). Collective responses for all items are presented in Tables 6-9 as results for traditionally certified teachers in the fall,

traditionally certified teachers in the spring, lateral entry teachers in the fall, and lateral entry teachers in the spring.

During the descriptive analysis of the archived fall data, this researcher noticed that none of the 147 respondents chose *Agree* for any question on the fall survey. This fact led the researcher to hypothesize that there was an error in the survey tool that might have hindered respondents' ability to select *Agree* as an option. Since the data provided by the district was archived, the researcher was unable to identify the true nature of the problem. Therefore, as none of the 147 respondents in the fall chose A*gree*, the researcher chose to complete the descriptive analysis in two ways: first, the fall and spring descriptive data were analyzed using responses *Slightly Agree* through *Strongly Agree* responses using the hypothesis that teachers may have chosen *Slightly Agree* or *Strongly Agree* as an option if the respondent was unable to select *Agree;* then the descriptive data were analyzed using responses *Slightly Disagree* through *Strongly Disagree*. Notable results for each reporting period are presented along with comparative figures for traditionally certified teachers' fall and spring data and lateral entry teachers' fall and spring data.

Fall survey: Traditionally certified teachers. Table 6 depicts the responses for traditionally certified teachers in the fall (n = 79). Using *Slightly Agree* through *Strongly Agree* responses, 97% of traditionally certified teachers in the fall reported they were *confident in their ability to teach their grade level or content area*, *use formative assessment,* and *contribute in a team meeting*. In contrast, 23% of teachers reported they were not *confident in their ability to work with students with behavioral or mental health concerns*; 20% of teachers reported they were not *confident in their ability to work with students with learning disabilities;* 19% of teachers reported they were not *confident in*

their ability to manage student behavior; and 13% of teachers reported they were not *confident to plan lessons that were culturally responsi*ve or *communicate with parents.*

Table 6

Fall Survey: Traditionally Certified Teachers' Perceptions of Readiness to Perform Teacher Tasks

I am confident in my ability to . . .	*N* = 79	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	79	1%	0%	1%	67%	0%	30%
Manage student behavior	79	1%	3%	15%	61%	0%	20%
Plan lessons that align with content standards	78	1%	0%	4%	64%	0%	31%
Plan lessons that are culturally responsive	79	3%	0%	10%	68%	0%	19%
Engage students	79	1%	0%	6%	65%	0%	28%
Differentiate instruction	79	1%	1%	6%	68%	0%	23%
Teach both high- and low-performing students	79	1%	4%	5%	67%	0%	23%
Teach students experiencing poverty	78	1%	3%	4%	67%	0%	26%
Teach students who are racially or culturally different from me	77	1%	0%	3%	56%	0%	40%
Contribute in a team collaborative meeting	79	1%	0%	1%	58%	0%	39%
Use formative assessments	79	1%	0%	1%	65%	0%	33%
Analyze data from student assessments	79	0%	1%	3%	67%	0%	29%
Adapt instruction based on data analyses	79	0%	1%	4%	75%	0%	20%
Communicate with parents	79	3%	3%	8%	65%	0%	23%
Work with students with behavioral or mental health concerns	79	3%	8%	13%	63%	0%	14%
Work with students who have learning disabilities	79	3%	5%	13%	62%	0%	18%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Traditionally certified teachers. Data in Table 7 depict the overall results for traditionally certified teachers (n = 89) on the spring survey. Using *Slightly Agree* through *Strongly Agree* responses, 98% of traditionally certified teachers in the spring reported they were *confident in their ability to teach their grade level or content area* and *use formative assessments;* 97% of traditionally certified teachers in the spring reported being *confident in their ability to engage students, plan lessons that align with content standards,* and *contribute in a team collaborative.* In contrast, 19% of traditionally certified teachers reported they were not confident in their ability to *work with students with behavioral or mental health concerns*; 16% of traditionally certified teachers reported they were not confident in their ability to *teach both high- and low-performing students*; and 13% of traditionally certified teachers in the spring reported they were confident in their ability to *work with students with learning disabilities*.

Table 7

Spring Survey: Traditionally Certified Teachers' Perceptions of Readiness to Perform Teacher Tasks

I am confident in my ability to . . .	*N* = 89	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	89	2%	0%	0%	58%	10%	29%
Manage student behavior	89	2%	1%	7%	48%	25%	17%
Plan lessons that align with content standards	88	2%	1%	0%	55%	14%	28%
Plan lessons that are culturally responsive	89	2%	1%	7%	55%	20%	15%
Engage students	89	2%	0%	1%	57%	15%	25%
Differentiate instruction	89	2%	1%	8%	49%	22%	17%
Teach both high- and low-performing students	88	2%	1%	13%	47%	20%	17%
Teach students experiencing poverty	89	2%	0%	4%	43%	20%	30%
Teach students who are racially or culturally different from me	89	2%	0%	2%	55%	10%	30%
Contribute in a team collaborative meeting	89	2%	0%	1%	49%	8%	39%
Use formative assessments	88	2%	0%	0%	53%	15%	30%
Analyze data from student assessments	89	2%	0%	6%	46%	18%	28%
Adapt instruction based on data analyses	89	2%	2%	7%	51%	19%	19%
Communicate with parents	89	2%	3%	2%	46%	19%	27%
Work with students with behavioral or mental health concerns	89	3%	2%	13%	44%	20%	17%
Work with students who have learning disabilities	88	5%	2%	6%	47%	18%	23%

Figure 8 depicts the comparison between traditionally certified teachers' highest

and lowest reported ratings of readiness in the fall in the spring. Bolded responses indicate that the response was the same for both fall and spring.

Traditionally Certified Teachers	Fall	Spring
Most Ready	• **Teach their grade level or content area** • **Contribute in a team collaborative meeting** • **Use formative assessments**	• **Teach their grade level or content area** • **Contribute in a team collaborative meeting** • **Use formative assessment** • Engage students • Plan lessons that align with content standards
Least Ready	• **Work with students with behavioral or mental health concerns** • **Work with students who have learning disabilities** • Manage student behavior • Plan lessons that were culturally responsive • Communicate with parents	• **Work with students with behavioral or mental health concerns** • **Work with students who have learning disabilities** • Teach both high- and low-performing students • Differentiate instruction • Adapt instruction based on data analyses

Figure 8. Comparison of Traditionally Certified Teachers' Fall and Spring Ratings of Highest and Lowest Perception of Readiness to Perform Teacher Tasks.

Fall survey: Lateral entry teachers. Data in Table 8 depict the overall results for lateral entry teachers (n = 54) on the fall survey. Using *Slightly Agree* through *Strongly Agree* responses, 98% of lateral entry teachers in the fall reported they were *confident in their ability to use formative assessment* and 96% of lateral entry teachers in the fall reported they were *confident in their ability to teach students experiencing poverty, teach students who were racially or culturally different than them, adapt instruction based on data analyses*, and *contribute in a team meeting.* In contrast, 20% of lateral entry teachers in the fall reported they were not *confident in their ability to work with students with behavioral or mental health concerns*; 19% of lateral entry teachers reported they were not *confident in their ability to work with students with learning*

disabilities, and 15% of lateral entry teachers reported they were not *confident in their ability to manage student behavior* or *teach both high- and low-performing students.*

Table 8

Fall Survey: Lateral Entry Teachers' Perceptions of Readiness to Perform Teacher Tasks

I am confident in my ability to . . .	*N* = 54	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	54	2%	4%	0%	65%	0%	30%
Manage student behavior	54	2%	6%	7%	69%	0%	17%
Plan lessons that align with content standards	54	2%	2%	6%	63%	0%	28%
Plan lessons that are culturally responsive	54	2%	2%	2%	74%	0%	20%
Engage students	54	2%	2%	2%	74%	0%	20%
Differentiate instruction	54	2%	4%	7%	72%	0%	15%
Teach both high- and low-performing students	54	2%	4%	9%	69%	0%	17%
Teach students experiencing poverty	54	2%	2%	0%	74%	0%	22%
Teach students who are racially or culturally different from me	54	2%	2%	0%	54%	0%	43%
Contribute in a team collaborative meeting	54	2%	0%	2%	52%	0%	44%
Use formative assessments	53	0%	2%	0%	68%	0%	30%
Analyze data from student assessments	54	0%	2%	4%	67%	0%	28%
Adapt instruction based on data analyses	54	0%	2%	2%	74%	0%	22%
Communicate with parents	54	2%	4%	7%	57%	0%	30%
Work with students with behavioral or mental health concerns	54	4%	2%	15%	56%	0%	24%
Work with students who have learning disabilities	54	2%	2%	15%	59%	0%	22%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Lateral entry teachers. Data in Table 9 depict the overall results for lateral entry teachers (*n* = 97) on the spring survey. Using *Slightly Agree* through *Strongly Agree* responses, 100% of lateral entry teachers in the spring reported they were *confident in their ability to teach their grade level or content area* and 99% of lateral entry teachers in the spring reported they were *confident in their ability to teach students who were racially or culturally different* than them; *teach students experiencing poverty; contribute in a team collaborative meeting* and *communicate with parents*. In contrast, 11% of lateral entry teachers reported they were not *confident in their ability to differentiate instruction*, 7% of lateral entry teachers in the spring reported they were not *confident in their ability to manage student behavior*; and 6% lateral entry teachers reported they were not *confident in their ability to teach both high- and low-performing students,* and *work with students with behavioral and mental health concerns.*

Table 9

Spring Survey: Lateral Entry Teachers' Perceptions of Readiness to Perform Teacher Tasks

I am confident in my ability to . . .	*N* = 97	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	97	0%	0%	0%	52%	13%	35%
Manage student behavior	97	1%	3%	3%	55%	15%	23%
Plan lessons that align with content standards	97	0%	0%	2%	46%	25%	27%
Plan lessons that are culturally responsive	97	0%	1%	3%	37%	29%	30%
Engage students	97	0%	0%	3%	57%	12%	28%
Differentiate instruction	95	0%	0%	11%	46%	20%	23%
Teach both high- and low-performing students	97	0%	0%	6%	48%	25%	21%
Teach students experiencing poverty	97	0%	0%	1%	46%	9%	43%
Teach students who are racially or culturally different from me	97	0%	0%	1%	41%	9%	48%
Contribute in a team collaborative meeting	97	0%	0%	1%	36%	15%	47%
Use formative assessments	97	0%	0%	3%	54%	14%	29%
Analyze data from student assessments	96	0%	1%	4%	44%	25%	26%
Adapt instruction based on data analyses	97	0%	1%	4%	45%	25%	25%
Communicate with parents	97	0%	0%	1%	51%	11%	37%
Work with students with behavioral or mental health concerns	97	1%	0%	5%	49%	15%	29%
Work with students who have learning disabilities	96	1%	1%	3%	52%	14%	29%

Figure 9 depicts the comparison between lateral entry teachers' highest and lowest reported ratings of perceptions of readiness in the fall and in the spring. Bolded responses indicate that the response was the same for both fall and spring.

Lateral Entry Teachers	Fall	Spring
Most Ready	• Use formative assessments • **Teach students experiencing poverty** • **Teach students who were racially or culturally different than them** • Adapt instruction based on data analyses • **Contribute in a team collaborative meeting**	• Teach their grade level or content area • **Teach students experiencing poverty** • **Teach students who were racially or culturally different than them** • **Contribute in a team collaborative meeting** • Communicate with parents
Least Ready	• **Work with students with behavioral or mental health concerns** • **Work with students who have learning disabilities** • **Manage student behavior** • **Teach both high- and low-performing** • **Differentiate instruction** • Communicate with Parents	• **Differentiate instruction** • **Manage student behavior** • **Teach both high- and low-performing students** • **Work with students with behavioral or mental health concerns** • **Work with students who have learning disabilities** • Adapt instruction based on data analyses • Analyze data from student assessments

Figure 9. Comparison of Lateral Entry Teachers' Fall and Spring Ratings of Highest and Lowest Perception of Readiness to Perform Teacher Tasks.

Summarizing the collective response data, traditionally certified teachers reported their highest areas of readiness to teach during both reporting periods were to teach their grade level or content area and use formative assessments during both reporting periods, whereas lateral entry teachers reported being ready to teach students experiencing poverty and students who were racially or culturally different than them. Both traditionally certified teachers and lateral entry teachers reported being ready to

contribute in a team collaborative meeting. Notably, traditionally certified teachers' lowest reporting areas of readiness to teach were the same during each reporting period: working with students with behavioral or mental health concerns and working with students with learning disabilities. Similarly, lateral entry teachers' lowest reporting areas of readiness to teach were also the same during each reporting period: working with students with behavioral or mental health concerns, working with students who have learning disabilities, managing student behavior, differentiating instruction, and teaching both high- and low-performing students.

As stated, further analysis of these responses as they aligned with each of the constructs *Knowledge of Learners* (Research Question 1b); *Knowledge of Subject Matter* (Research Question 1c); and *Knowledge of Teacher*s (Research Question 1d) are presented in the discussion section for each research question.

Research Question 1

How does novice teacher perceived readiness for teaching change during the first year (Quantitative)? As indicated, the data for Research Question 1 were split into four subgroups: teachers' perceived readiness to teach; teachers' perceived readiness relating to the knowledge of learners and their development in social contexts; teachers' perceived readiness relating to the knowledge of subject matter and curriculum goals; and teachers' perceived readiness relating to the knowledge of teaching.

Research Question 1a

How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach? Data for Research Question 1a were gathered from item 11 on the fall survey and item 7 on the spring survey.

Table 10 presents new teachers' perceptions of readiness to teach from the fall

and spring surveys, based on teacher certification pathway.

Table 10

Fall/Spring: Perception of Readiness to Teach

How confident are you that you are ready to teach?	Traditional				Lateral Entry			
	Fall *N* = 79		Spring *N* = 88		Fall *N* = 55		Spring *N* = 97	
Not at all confident	0	0%	0	0%	1	2%	1	1%
Somewhat confident	16	20%	16	18%	11	20%	25	26%
Confident	41	52%	57	65%	31	56%	45	46%
Very confident	22	28%	15	17%	11	20%	26	27%

While the sample sizes changed from fall to spring, traditionally certified teachers' reported perceptions of overall readiness to teach appeared to decline (Fall, *Very Confident* 28%; Spring, *Very Confident* 17%), whereas lateral entry teachers' overall readiness to teach appeared to increase (Fall, *Very Confident* 20%; Spring, *Very Confident* 27%). To explore the relationship between both traditionally trained and lateral entry teachers' perceptions of overall readiness to teach, a chi-square analysis and two-sample *t* test were completed.

Chi-square analysis. A chi-square analysis was completed to determine if there was an association between the type of teacher preparation and a teacher's level of readiness to teach (Figure 10).

FALL					**SPRING**			
Confident	**Traditional**	**Lateral**			**Confident**	**Traditional**	**Lateral**	
Observed	63	43	106		Observed	72	71	143
Expected	62.4925	43.5075	106		Expected	68.0216	74.9784	143
O - E	0.5075	-0.5075			O - E	3.9784	-3.9784	
(O-E)^2	0.2575	0.2575			(O-E)^2	15.8275	15.8275	
(O-E)^2/E	0.0041	0.0059			(O-E)^2/E	0.2327	0.2111	
Not Confident	**Traditional**	**Lateral**			**Not Confident**	**Traditional**	**Lateral**	
Observed	16	12	28		Observed	16	26	42
Expected	16.5075	11.4925	28		Expected	19.9784	22.0216	42
O - E	-0.5075	0.5075			O - E	-3.9784	3.9784	
(O-E)^2	0.2575	0.2575			(O-E)^2	15.8275	15.8275	
(O-E)^2/E	0.0156	0.0224			(O-E)^2/E	0.7922	0.7187	
Chi Square		**0.048047295**			**Chi Square**		**1.954733801**	

Figure 10. Chi-Square Analysis Fall/Spring Overall Perception of Readiness to Teach.

On the fall data, an association between teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined ($\chi^2 = .048$, $df = 1$, *ns*). Equally, an association between teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined on the spring survey ($\chi^2 = 1.955$, $df = 1$, *ns*), indicating the type of teacher preparation was not associated with teachers' overall level of readiness to teach.

Two-sample *t* test. Of the 147 respondents in the fall, 96 responded in the spring. Upon receipt of the raw data, this researcher found that the survey collection tool did not yield a marker for a one-to-one correspondence between respondents. Therefore,

conducting a paired *t* test was not possible. However, two-sample *t* tests were performed to identify if a meaningful relationship existed between traditional teachers' perceptions of readiness to teach in the fall and traditional teachers' perceptions of their readiness to teach in the spring as well as lateral entry teachers' perceptions of readiness to teach in the fall and lateral entry teachers' perceptions of readiness to teach in the spring (Table 11).

Table 11

Two-Sample t Test: Overall Perception of Readiness to Teach

	N	M	SS	dM	df	sqrt (denom)	t
Traditional							
Fall	79	3.076	37.544	0.087	165	0.100	0.87411
Spring	88	2.989	30.989				
Lateral Entry							
Fall	54	2.963	25.926	-0.027	149	0.125	-0.21361
Spring	97	2.990	54.990				

Note. N = Number of responses; M = Mean of responses; SS = Sum of the squared deviations of the responses; dM = differences in the means; df = degrees of freedom; sqrt(denom) = denominator of formula; t = t value.

The analysis of the means demonstrated a meaningful relationship did not exist in either traditional (t_{165} =0.87, p <.05) or lateral entry (t_{149} =0.21, p <.05) teachers' reported perceptions of readiness to teach over time, indicating teachers' overall perceptions of readiness to teach not dependent on time.

Research Question 1b

How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of learners and their development in social contexts? Data for Research Question 1b were gathered from survey items 16, 17, 18, and 25 on the

fall survey and survey items 12, 13, 14, and 21 on the spring survey. Tables 12-15 display the ratings of readiness in knowledge of learners (Darling-Hammond, 2006) for teachers who identified as traditionally certified or lateral entry teachers in the fall and spring.

Fall survey: Traditionally certified teachers. Data in Table 12 depict the results for traditionally certified teachers on the fall survey associated with readiness in knowledge of learners (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 92% of traditionally certified teachers reported they were *confident in their ability to engage stude*nts. Teachers reported the least readiness in *confidence in their ability with communicate with parents*.

Table 12

Fall Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Learners

I am confident in my ability to . . .	*N* = 79	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Engage students	79	1%	0%	6%	65%	0%	28%
Differentiate instruction	79	1%	1%	6%	68%	0%	23%
Teach both high- and low-performing students	79	1%	4%	5%	67%	0%	23%
Communicate with parents	79	3%	3%	8%	65%	0%	23%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Traditionally certified teachers. Data in Table 13 depict the results for traditionally certified teachers on the spring survey associated with readiness in knowledge of learners (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 97% of traditionally certified teachers reported they were *confident in their ability to engage stude*nts; however, 15% of traditionally certified teachers reported they were least *confident in their ability to teach both high- and low-*

performing students. As noted previously, Darling-Hammond et al.'s (2002) research and Tschannen-Moran et al.'s (1998) review of multiple studies found teachers' sense of their knowledge of learners related to overall student achievement. Therefore, the apparent decline in traditionally certified teachers' confidence levels between fall and spring is further explored through chi-square and t-test analyses later in this chapter.

Table 13

Spring Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Learners

I am confident in my ability to . . .	*N* = 89	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Engage students	89	2%	0%	1%	57%	15%	25%
Differentiate instruction	89	2%	1%	8%	49%	22%	17%
Teach both high- and low-performing students	88	2%	1%	13%	47%	20%	17%
Communicate with parents	89	2%	3%	2%	46%	19%	27%

Fall survey: Lateral entry teachers. Data in Table 14 depict the results for lateral entry teachers on the fall survey associated with ratings of readiness in knowledge of learners (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 94% of lateral entry respondents in the fall reported they were *confident in their ability to engage stude*nts. In contrast, reviewing *Strongly Disagree* through *Slightly Disagree* responses,15% of lateral entry teachers reported they were not *confident in their ability to teach both high- and low-performing students* and 13% of lateral entry teachers reported they were not *confident in their ability to differentiate instruction* or *communicate with parents*.

Table 14

Fall Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Learners

I am confident in my ability to . . .	*N* = 54	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Engage students	54	2%	2%	2%	74%	0%	20%
Differentiate instruction	54	2%	4%	7%	72%	0%	15%
Teach both high- and low-performing students	54	2%	4%	9%	69%	0%	17%
Communicate with parents	54	2%	4%	7%	57%	0%	30%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Lateral entry teachers. Data in Table 15 depict the results for lateral entry teachers on the spring survey associated with ratings of readiness in knowledge of learners (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 99% of lateral entry teachers in the spring reported they were *confident in their ability to communicate with parents;* however, reviewing *Strongly Disagree* through *Slightly Disagree* responses, 11% of lateral entry teachers reported they were *confident in their ability to differentiate instruction* as compared with 6% in the fall. Differentiation, according to Tomlinson (2005),

> begins when a teacher takes an honest look at the diversity of learners in the classroom, accepts responsibility for the success of each of them, and says, “If they’re all going to learn, I’ll have to find more than one route to success!” (p. 14)

Table 15

Spring Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Learners

I am confident in my ability to . . .	*N* = 97	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Engage students	97	0%	0%	3%	57%	12%	28%
Differentiate instruction	95	0%	0%	11%	46%	20%	23%
Teach both high- and low-performing students	97	0%	0%	6%	48%	25%	21%
Communicate with parents	97	0%	0%	1%	51%	11%	37%

Again, teachers' "efficacy about what they themselves can accomplish" (Darling-Hammond et al., 2002, p. 20) has been related to student overall achievement (Tschannen-Moran et al., 1998). Therefore, the relationship between lateral entry teachers' confidence level between fall and spring is further explored next through chi-square and *t*-test analyses.

Chi-square analysis. A chi-square analysis was completed to determine if there was an association between the type of teacher preparation and a teacher's level of readiness on the knowledge of learners (Figure 11).

FALL			
Confident	**Traditional**	**Lateral**	
Observed	285	191	476
Expected	282.7368	193.2632	476
O – E	2.2632	-2.2632	
(O-E)^2	5.1219	5.1219	
(O-E)^2/E	0.0181	0.0265	
Not Confident	**Traditional**	**Lateral**	
Observed	31	25	56
Expected	33.2632	22.7368	56
O – E	-2.2632	2.2632	
(O-E)^2	5.1219	5.1219	
(O-E)^2/E	0.1540	0.2253	
Chi Square	**0.423866206**		

SPRING			
Confident	**Traditional**	**Lateral**	
Observed	327	365	692
Expected	331.0378	360.9622	692
O - E	-4.0378	4.0378	
(O-E)^2	16.3041	16.3041	
(O-E)^2/E	0.0493	0.0452	
Not Confident	**Traditional**	**Lateral**	
Observed	27	21	48
Expected	22.9622	25.0378	48
O - E	4.0378	-4.0378	
(O-E)^2	16.3041	16.3041	
(O-E)^2/E	0.7100	0.6512	
Chi Square	**1.45564344**		

Figure 11. Chi-Square Analysis Fall/Spring Knowledge of Learners.

On the fall data, an association between teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined ($\chi^2 = .424$, $df = 1$, *ns*). Equally, an association between teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined on the spring survey ($\chi^2 = 1.456$, $df = 1$, *ns*), indicating that the type of teacher preparation was not associated with teacher level of readiness on their knowledge of learners.

Two-sample *t* test. Two-sample *t* tests were performed to identify if a meaningful relationship existed between traditional teachers' perceptions of readiness in

relation to their knowledge of learners (Darling-Hammond, 2006) in the fall and traditional teachers' perceptions of their readiness in relation to their knowledge of learners (Darling-Hammond, 2006) in the spring as well as lateral entry teachers' perceptions of readiness in relation to their knowledge of learners (Darling-Hammond, 2006) in the fall and lateral entry teachers' perceptions of readiness in relation to their knowledge of learners (Darling-Hammond, 2006) in the spring (Table 16).

Table 16

Two-Sample t Test: Knowledge of Learners

	N	M	SS	dM	df	sqrt (denom)	t
Traditional							
Fall	79	4.332	358.111	-0.133	669	0.083	-1.601
Spring	89	4.465	408.310				
Lateral Entry							
Fall	54	4.222	243.333	-0.441	600	0.084	-5.281
Spring	97	4.663	336.218				

Note. N = Number of responses - four questions; M = Mean of responses; SS = Sum of the squared deviations of the responses; dM = differences in the means; df = degrees of freedom; sqrt(denom) = denominator of formula; t = t value

The two-sample *t* tests demonstrated a meaningful relationship did not exist between the means for traditionally certified teachers' reported sense of readiness in relation to their knowledge of learners (t_{669} = -0.16, p <.05) but did exist for lateral entry teachers' reported sense of readiness in relation to their knowledge of learners over time (t_{600} = -0.528, p <.05), indicating lateral entry teachers' perceived sense of readiness in relation to their knowledge of learners after 6 months of teaching increased over lateral entry teachers' knowledge of learners at the beginning of their career.

Research Question 1c

How does traditional teacher certification versus lateral entry affect teacher

perceived readiness in knowledge of subject matter and curriculum goals? Data for Research Question 1b were gathered from survey items 12, 14, 18, 26, and 27 on the fall survey and survey items 8, 10, 14, 22, and 23 on the spring survey. Tables 17-20 display the ratings of readiness in knowledge of subject matter and curriculum goals for teachers who identified as traditionally certified teachers or lateral entry in the fall and spring.

Fall survey: Traditionally certified teachers. Data in Table 17 depict the results for traditionally certified teachers on the fall survey associated with ratings of readiness in knowledge of subject matter and curriculum goals (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 97% of traditionally certified teachers reported they were *confident in their ability* to *teach their grade level or subject area;* however, reviewing *Strongly Disagree* through *Slightly Disagree* responses, 23% of traditionally certified teachers reported they were not *confident in their ability to work with students with behavioral or mental health concerns,* 20% of teachers reported they were not *confident in their ability to work with students who have learning disabilities,* and 10% reported they were not *confident in their ability to work with both high- and low-performing students.*

Table 17

Fall Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Subject Matter and Curriculum Goals

I am confident in my ability to . . .	*N* = 79	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	79	1%	0%	1%	67%	0%	30%
Plan lessons that align with content standards	78	1%	0%	4%	64%	0%	31%
Teach both high- and low-performing students	79	1%	4%	5%	67%	0%	23%
Work with students with behavioral or mental health concerns	79	3%	8%	13%	63%	0%	14%
Work with students who have learning disabilities	79	3%	5%	13%	62%	0%	18%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Traditionally certified teachers. Data in Table 18 depict the results for traditionally certified teachers on the spring survey associated with ratings of readiness in knowledge of subject matter and curriculum goals (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 98% of traditionally certified teachers reported they were *confident in their ability to teach their grade level or subject area* and *plan lessons that align with content standards;* however, reviewing *Strongly Disagree* through *Slightly Disagree* responses, 19% of traditionally certified teachers reported they were not *confident in their ability to work with students with behavioral or mental health concerns*, 16% reported they were not *confident in their ability to teach both high- and low-performing students* and 13% reported they were not *confident to work with students who have learning disabilities.* Supporting this discrepancy, Gould (2013) noted, “novice teachers . . . recognize differences among

students but found it difficult to be responsive to those differences" (para. 5).

Table 18

Spring Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Subject Matter and Curriculum Goals

I am confident in my ability to . . .	*N* = 89	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	89	2%	0%	0%	58%	10%	29%
Plan lessons that align with content standards	88	2%	1%	0%	55%	14%	28%
Teach both high- and low-performing students	88	2%	1%	13%	47%	20%	17%
Work with students with behavioral or mental health concerns	89	3%	2%	13%	44%	20%	17%
Work with students who have learning disabilities	88	5%	2%	6%	47%	18%	23%

Fall survey: Lateral entry teachers. Data in Table 19 depict the results for lateral entry teachers on the fall survey associated with ratings of readiness in knowledge of subject matter and curriculum goals (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 94% of lateral entry teachers reported they were *confident in their ability to teach their grade level or subject area;* however, reviewing *Strongly Disagree* through *Slightly Disagree* responses, 20% of lateral entry teachers reported they were not *confident in their ability to work with students with behavioral or mental health concerns,* 19% reported they were not *confident in their ability to work with students who have learning disabilities,* and 15% reported they were not *confident in their ability to teach both high- and low-performing students.*

Table 19

Fall Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Subject Matter and Curriculum Goals

I am confident in my ability to . . .	*N* = 54	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	54	2%	4%	0%	65%	0%	30%
Plan lessons that align with content standards	54	2%	2%	6%	63%	0%	28%
Teach both high- and low-performing students	54	2%	4%	9%	69%	0%	17%
Work with students with behavioral or mental health concerns	54	4%	2%	15%	56%	0%	24%
Work with students who have learning disabilities	54	2%	2%	15%	59%	0%	22%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Lateral entry teachers. Metzler and Woessmann (2012) reported, "teacher subject knowledge exerts a statistically and quantitatively significant impact on student achievement" (p. 1). On the spring survey (Table 20), 100% of lateral entry teachers reported they were *confident in their ability to teach their grade level or subject area*. Overall, less than 7% of lateral entry teachers on the spring survey reported they were not ready to teach any of the tasks identified in the survey associated with ratings of readiness in knowledge of subject matter and curriculum goals (Darling-Hammond, 2006). The lowest readiness scores, with 6% of teachers reporting they *Strongly Disagreed, Disagreed, or Slightly Disagree,* were teachers' readiness to *teach both high- and low-performing students* and *work with students with behavioral or mental health concerns.*

Table 20

Spring Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Subject Matter and Curriculum Goals

I am confident in my ability to . . .	*N* = 97	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Teach my grade level or content subject areas	97	0%	0%	0%	52%	13%	35%
Plan lessons that align with content standards	97	0%	0%	2%	46%	25%	27%
Teach both high- and low-performing students	97	0%	0%	6%	48%	25%	21%
Work with students with behavioral or mental health concerns	97	1%	0%	5%	49%	15%	29%
Work with students who have learning disabilities	96	1%	1%	3%	52%	14%	29%

Further exploration of the differences between traditional and lateral entry teachers' perceptions of confidence in the area of knowledge of subject matter will be completed through chi-square and *t* test analyses later in this section.

Chi-square analysis. A chi-square analysis was completed to determine if there was an association between the type of teacher preparation and a teacher's level of readiness on the knowledge of subject matter (Figure 12).

FALL			
Confident	**Traditional**	**Lateral**	
Observed	346	233	579
Expected	343.5633	235.4367	579
O – E	2.4367	-2.4367	
(O-E)^2	5.9377	5.9377	
(O-E)^2/E	0.0173	0.0252	
Not Confident	**Traditional**	**Lateral**	
Observed	48	37	85
Expected	50.4367	34.5633	85
O – E	-2.4367	2.4367	
(O-E)^2	5.9377	5.9377	
(O-E)^2/E	0.1177	0.1718	
Chi Square		**0.332022594**	

SPRING			
Confident	**Traditional**	**Lateral**	
Observed	395	465	860
Expected	410.4968	449.5032	860
O - E	-15.4968	15.4968	
(O-E)^2	240.1496	240.1496	
(O-E)^2/E	0.5850	0.5343	
Not Confident	**Traditional**	**Lateral**	
Observed	47	19	66
Expected	31.5032	34.4968	66
O - E	15.4968	-15.4968	
(O-E)^2	240.1496	240.1496	
(O-E)^2/E	7.6230	6.9615	
Chi Square		**15.70380056**	

Figure 12. Chi-Square Analysis Knowledge of Subject Matter.

On the fall data, an association between teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined ($\chi^2 = .332$, $df = 1$, *ns*); however, an association between teachers' perceptions of readiness to teach and the knowledge of subject matter was found on the spring survey ($\chi^2 = 15.704$, $df = 1$, *s*). As shown in Figure 12, lateral entry teachers reporting readiness to teach knowledge of subject matter in the spring was higher than the expected value and lateral entry teachers reporting non-readiness in the spring was lower than the expected value. This relative increase in lateral entry teachers' reported perception of readiness in the spring is significant based on the calculated χ^2 value as compared to the reports of

lateral entry teachers' perceptions of readiness in the fall. In contrast, the same results for traditional teachers showed a relative decrease in perception of readiness in the spring. The spring results indicate the type of teacher preparation could predict a teacher's level of confidence on the knowledge of subject matter.

Two-sample *t* test. Two-sample *t* tests were performed to identify if a meaningful relationship existed between traditional teachers' perceptions of readiness in relation to their knowledge of subject matter (Darling-Hammond, 2006) in the fall and traditional teachers' perceptions of their readiness in relation to their knowledge of subject matter (Darling-Hammond, 2006) in the spring as well as lateral entry teachers' perceptions of readiness in relation to their knowledge of subject matter (Darling-Hammond, 2006) in the fall and lateral entry teachers' perceptions of readiness in relation to their knowledge of subject matter (Darling-Hammond, 2006) in the spring (Table 21).

Table 21

Two-Sample t Test: Knowledge of Subject Matter

	N	M	SS	dM	df	sqrt (denom)	t
Traditional							
Fall	79	4.272	477.942	-0.172	834	0.077	-2.225
Spring	89	4.443	559.086				
Lateral Entry							
Fall	54	4.274	345.719	-0.422	752	0.077	-5.450
Spring	97	4.696	436.353				

Note. N = Number of responses - five questions; M = Mean of responses; SS = Sum of the squared deviations of the responses; dM = differences in the means; df = degrees of freedom; sqrt(denom) = denominator of formula; t = t value.

The two-sample *t* tests demonstrated a meaningful relationship did exist between the means for both traditionally certified teachers' reported sense of readiness in relation

to their knowledge of subject matter over time (t_{834} = -0.222, p <.05) as well as for lateral entry teachers' reported sense of readiness over time in relation to their knowledge of subject matter (t_{752} = -0.545, p <.01), indicating teachers' readiness in relation to their knowledge of subject matter was not dependent on time.

Research Question 1d

How does traditional teacher certification versus lateral entry affect teachers' perceived readiness in knowledge of teaching? Data for Research Question 1d were gathered from survey items 13, 15, 19, 20, 21, 22, 23, and 24 on the fall survey and survey items 9, 11, 15, 16, 17, 18, 19, and 20 on the spring survey. Tables 22-25 display the ratings of readiness in knowledge of teaching for teachers who identified as traditionally certified teachers or lateral entry in the fall and spring. Looking at both *Strongly Agre*e and *Slightly Agree* through *Strongly Agree* responses, the areas teachers reported the highest and lowest rates of confidence were the same for both traditional and lateral entry teachers in both fall and spring.

Fall survey: Traditionally certified teachers. Data in Table 22 depict the results for traditionally certified teachers on the fall survey associated with ratings of readiness in knowledge of teaching (Darling-Hammond, 2006). Looking at *Slightly Agree* through *Strongly Agree* responses, 97% of traditionally certified teachers reported they were *confident in their ability to contribute in a team collaborative meeting* and *use formative assessments;* however, using *Strongly Disagree* through *Slightly Disagree*, 19% of traditionally certified teachers reported they were not *confident in their ability to manage student behavior* and 13% reported they were not *confident in their ability to plan lessons that were culturally responsive.*

Table 22

Fall Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Teaching

I am confident in my ability to . . .	*N* = 79	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Manage student behavior	79	1%	3%	15%	61%	0%	20%
Plan lessons that are culturally responsive	79	3%	0%	10%	68%	0%	19%
Teach students experiencing poverty	78	1%	3%	4%	67%	0%	26%
Teach students who are racially or culturally different from me	77	1%	0%	3%	56%	0%	40%
Contribute in a team collaborative meeting	79	1%	0%	1%	58%	0%	39%
Use formative assessments	79	1%	0%	1%	65%	0%	33%
Analyze data from student assessments	79	0%	1%	3%	67%	0%	29%
Adapt instruction based on data analyses	79	0%	1%	4%	75%	0%	20%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Notably, "Well-managed classrooms provide an environment in which teaching and learning can flourish" (Marzano, Marzano, & Pickering, 2003, para. 1). In addition, "when teachers use knowledge about the social, cultural, and language backgrounds of their students when planning and implementing instruction, the academic achievement of students can increase" (Darling-Hammond & Bransford, 2005, p. 233).

Spring survey: Traditionally certified teachers. Data in Table 23 depict the results for traditionally certified teachers on the spring survey associated with ratings of readiness in knowledge of teaching (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 98% of traditionally certified teachers reported they

were *confident in their ability to use formative assessments* and 97% of traditionally certified teachers reported they were *confident in their ability to contribute in a team collaborative meeting;* however, reviewing *Strongly Disagree* through *Slightly Disagree* responses, 11% of traditionally certified teachers reported they were *confident in their ability to adapt instruction based on data analyses*, and 10% of traditionally certified teachers reported they were *confident in their ability to manage student behavior* and *plan lessons that were culturally responsive.*

Table 23

Spring Survey: Traditionally Certified Teachers' Perceptions of Readiness in Knowledge of Teaching

I am confident in my ability to . . .	*N* = 89	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Manage student behavior	89	2%	1%	7%	48%	25%	17%
Plan lessons that are culturally responsive	89	2%	1%	7%	55%	20%	15%
Teach students experiencing poverty	89	2%	0%	4%	43%	20%	30%
Teach students who are racially or culturally different from me	89	2%	0%	2%	55%	10%	30%
Contribute in a team collaborative meeting	89	2%	0%	1%	49%	8%	39%
Use formative assessments	88	2%	0%	0%	53%	15%	30%
Analyze data from student assessments	89	2%	0%	6%	46%	18%	28%
Adapt instruction based on data analyses	89	2%	2%	7%	51%	19%	19%

The apparent change in teacher confidence level between fall and spring is further explored through chi-square and *t*-test analyses later in this chapter.

Fall survey: Lateral entry teachers. Data in Table 24 depict the results for

lateral entry teachers on the fall survey associated with ratings of readiness in knowledge of teaching (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 98% of lateral entry teachers in the fall reported they were *confident in their ability to use formative assessments*. In contrast, looking at *Strongly Disagree* through *Slightly Disagree* responses, 15% of traditionally certified teachers reported they were *confident in their ability to manage student behavior*. As noted earlier, a well-managed classroom has an impact on student achievement (Marzano et al., 2003).

Table 24

Fall Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Teaching

I am confident in my ability to . . .	*N* = 54	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Manage student behavior	54	2%	6%	7%	69%	0%	17%
Plan lessons that are culturally responsive	54	2%	2%	2%	74%	0%	20%
Teach students experiencing poverty	54	2%	2%	0%	74%	0%	22%
Teach students who are racially or culturally different from me	54	2%	2%	0%	54%	0%	43%
Contribute in a team collaborative meeting	54	2%	0%	2%	52%	0%	44%
Use formative assessments	53	0%	2%	0%	68%	0%	30%
Analyze data from student assessments	54	0%	2%	4%	67%	0%	28%
Adapt instruction based on data analyses	54	0%	2%	2%	74%	0%	22%

Note. Fall data adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Spring survey: Lateral entry teachers. Data in Table 25 depict the results for lateral entry teachers on the spring survey associated with ratings of readiness in knowledge of teaching (Darling-Hammond, 2006). Using *Slightly Agree* through *Strongly Agree* responses, 99% of lateral entry teachers reported they were *confident in*

their ability to teach students experiencing poverty, teach students who were racially and culturally different than them and *contribute in a team collaborative meeting*. Reviewing *Strongly Disagree* through *Slightly Disagree* responses, 7% of lateral entry teachers reported were *confident in their ability to manage student behavior.* The apparent increase in teacher reported readiness to manage student behavior as associated with teacher knowledge of teaching is further explored next through chi-square and *t*-test analyses.

Table 25

Spring Survey: Lateral Entry Teachers' Perceptions of Readiness in Knowledge of Teaching

I am confident in my ability to . . .	*N* = 97	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Manage student behavior	97	1%	3%	3%	55%	15%	23%
Plan lessons that are culturally responsive	97	0%	1%	3%	37%	29%	30%
Teach students experiencing poverty	97	0%	0%	1%	46%	9%	43%
Teach students who are racially or culturally different from me	97	0%	0%	1%	41%	9%	48%
Contribute in a team collaborative meeting	97	0%	0%	1%	36%	15%	47%
Use formative assessments	97	0%	0%	3%	54%	14%	29%
Analyze data from student assessments	96	0%	1%	4%	44%	25%	26%
Adapt instruction based on data analyses	97	0%	1%	4%	45%	25%	25%

Chi-square analysis. A chi-square analysis was completed to determine if there was an association between the type of teacher preparation and teacher level of readiness in the knowledge of teaching (Figure 13). On the fall data, an association between

teachers' perceptions of readiness to teach when entering the profession with traditional certification or teachers' perceptions of readiness to teach when entering the profession as lateral entry could not be determined ($\chi^2 = 1.568$, *df* = 1, *ns*); however, an association was found in the χ^2 value between the teachers' perceptions of readiness entering the profession with traditional certification and teachers' perceptions of readiness entering the profession as lateral entry on the spring survey ($\chi^2 = 9.384$, *df* = 1, *s*). As shown in Figure 13, lateral entry teachers' reporting readiness to teach knowledge of subject matter in the spring was higher than the expected value and lateral entry teachers' reporting non-readiness in the spring was lower than the expected value. This relative increase in lateral entry teachers' reported perception of readiness in the spring is significant based on the calculated χ^2 value as compared to the reports of lateral entry teachers' perceptions of readiness in the fall. In contrast, the same results for traditional teachers showed a relative decrease in perception of readiness in the spring. The spring results indicate the type of teacher preparation could predict a teacher's level of confidence on the knowledge of teaching.

FALL			
Confident	**Traditional**	**Lateral**	
Observed	574	408	982
Expected	578.9124	403.0876	982
O – E	-4.9124	4.9124	
(O-E)^2	24.1315	24.1315	
(O-E)^2/E	0.0417	0.0599	
Not Confident	**Traditional**	**Lateral**	
Observed	45	23	68
Expected	40.0876	27.9124	68
O – E	4.9124	-4.9124	
(O-E)^2	24.1315	24.1315	
(O-E)^2/E	0.6020	0.8645	
Chi Square		**1.568063533**	

SPRING			
Confident	**Traditional**	**Lateral**	
Observed	664	748	1412
Expected	677.0772	734.9228	1412
O - E	-13.0772	13.0772	
(O-E)^2	171.0140	171.0140	
(O-E)^2/E	0.2526	0.2327	
Not Confident	**Traditional**	**Lateral**	
Observed	50	27	77
Expected	36.9228	40.0772	77
O - E	13.0772	-13.0772	
(O-E)^2	171.0140	171.0140	
(O-E)^2/E	4.6317	4.2671	
Chi Square		**9.384053678**	

Figure 13. Chi-Square Analysis Knowledge of Teaching.

Two-sample *t* test. Two-sample *t* tests were performed to identify if a meaningful relationship existed between traditional teachers' perceptions of readiness in relation to their knowledge of learners (Darling-Hammond, 2006) in the fall and traditional teachers' perceptions of their readiness in relation to their knowledge of teaching (Darling-Hammond, 2006) in the spring as well as lateral entry teachers' perceptions of readiness in relation to their knowledge of teaching (Darling-Hammond, 2006) in the fall and lateral entry teachers' perceptions of readiness in relation to their knowledge of teaching (Darling-Hammond, 2006) in the spring (Table 26). The two-sample *t* tests demonstrated a meaningful relationship did not exist in traditionally certified teachers' reported sense of readiness in relation to their knowledge of teaching ($t_{1338} = -0.18$, $p < .05$), but did exist for lateral entry teachers' reported sense of readiness

in relation to their knowledge of teaching ($t_{1204} = -0.568$, $p < .01$), indicating lateral entry teachers' sense of readiness in relation to their knowledge of teaching after 6 months of teaching is related to lateral entry teachers' knowledge of teaching at the beginning of their career.

Table 26

Two-Sample t Test: Knowledge of Teaching

	N	M	SS	dM	df	sqrt (denom)	t
Traditional							
Fall	79	4.463	696.372	-0.106	1338	0.058	-1.811
Spring	89	4.568	820.442				
Lateral Entry							
Fall	54	4.469	483.327	-0.34293	1204	0.060	-5.679
Spring	97	4.812	732.495				

Note. N = Number of responses - eight questions; M = Mean of responses; SS = Sum of the squared deviations of the responses; dM = differences in the means; df = degrees of freedom; sqrt(denom) = denominator of formula; t = t value.

Research Question 2

What support structures contribute to novice teachers' perceptions of job readiness (Qualitative)? Questions pertaining to the support structures novice teachers perceived as beneficial were asked as qualitative items on both the fall and spring surveys. In addition, after responses on both surveys were coded, themes identified, and data triangulated, focus group questions were developed in order to further explore the themes from the qualitative survey responses.

Open-ended survey responses. On the fall survey, items 28, 29, and 30 (Appendix A) asked respondents to indicate the type of support they needed from their principal, their curriculum facilitator, and their instructional coach (induction coach,

mentor, other teachers in their school) to be successful. Results from the archived survey were coded and triangulated by the Research and Evaluation Department personnel and provided to this researcher. Figure 14 depicts the support novice teachers indicated they needed from administrators, curriculum facilitators, and instructional coaches on the fall archived survey data.

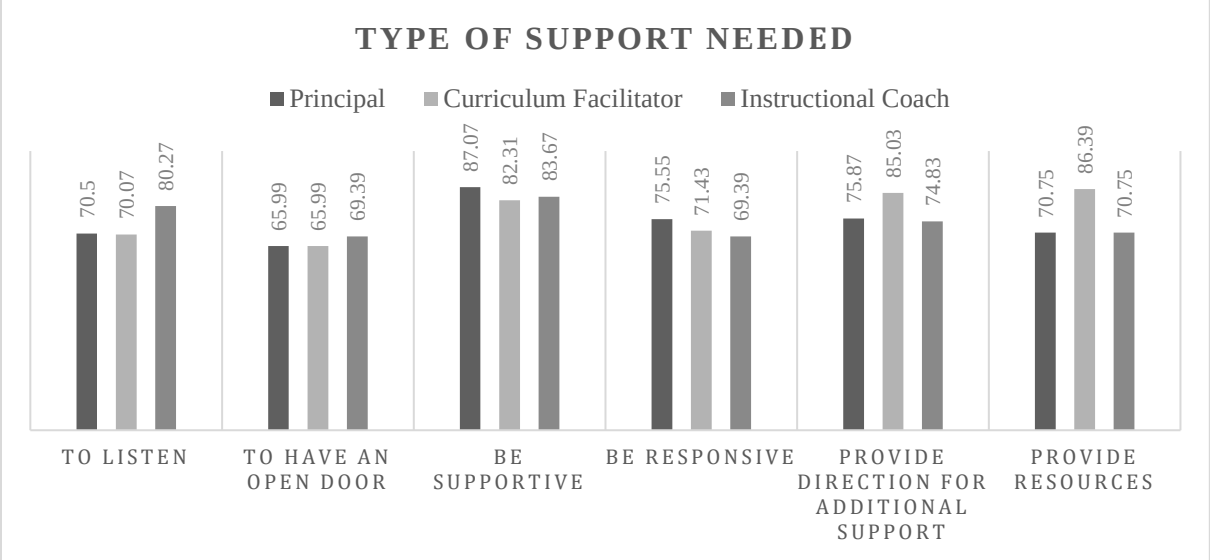

Figure 14. Support Desired from Administrative Staff. Adapted from Fall 2016 New Teacher Survey Preliminary Findings by New Teacher Survey Team, 2017. Adapted with permission.

Novice teachers rated *being supportive* as the leading type of support they needed from administrative staff and instructional coaches on the fall survey. In contrast, the support most desired from curriculum facilitators was *providing instructional resources and direction for additional support*. For all three levels of administrative support personnel, teachers reported *being supportive* and *providing direction for additional support* within the top three areas of need.

The spring survey asked respondents to explain ratings provided to question 28, question 31, question 35, and question 39 or question 41 (Appendix D). In addition, the

survey asked respondents to identify components of education that would make them remain in education, leave education, ways principals could keep the respondents at their current schools, and ways the district could retain the respondents' service to the district. The open-ended responses were coded and triangulated by this researcher and the research and evaluation department of the district where this research was conducted. Responses were sorted into three codes: High Level – responses that indicated teachers received time, emotional support, and resources from a member of the support team (administrator, mentor, instructional coach); Medium Level – responses that indicated teachers were indifferent about the support they received; and Low Level – responses that indicated teachers were unsatisfied with the support received. For example, this traditionally certified teacher's response on the spring survey was coded as High Level:

> We collaborated on a daily/hourly basis throughout the week and weekends. She was (*sic*) assisted me with anything I needed, including creating assessments, assessment calendars, and lesson plans. She has also helped me create basic materials necessary in the classroom such as: classroom spread sheets, mastery of learning, and data analysis tools.

Similarly, one low-level response, also from a traditionally certified teacher, stated, "She was there when I reached out if necessary, but she did not make much of an effort to help me" (New Teacher Survey – Spring, 2017). A lateral entry teacher's high-level response indicated, "she goes out of her way to make sure that I have what I need and should be looking for" (New Teacher Survey – Spring, 2017).

Teacher responses varied based on the person providing the support to the new teacher. For instance, one lateral entry teacher reported, "my mentor has only been teaching about 4 years so he doesn't have as much past experience to pull from" and

pertaining to the respondent's administrator, "he always listens to my questions and points me to answers. Positive feedback is always given in corrective areas" (New Teacher Survey – Spring, 2017).

When asked, *Out of all your support sources this year, which has been the most beneficial? Please explain why,* responses included mentors, curriculum facilitators, teachers from other schools, and other teachers. One teacher summed up the support received from others,

> All the other staff and the one teacher who has taught my grade level. What BTs need is emotional support on top of instructional more so. Your first year is your hardest and I don't think I have cried as much over a job as I have this one. Your fellow teachers are the people you look to for guidance and support. Without them, I would have honestly quit this job in September. (New Teacher Survey – Spring, 2017)

On the spring survey, respondents were also asked to identify areas in which they still needed support. The respondents were provided a list of 14 choices identified by members of the New Teacher Support Team as areas of high need based on conversations with practicing teachers, induction coaches, principals, and the human resources personnel (New Teacher Support Team, personal communication, January 2017). The top three areas of continued support identified by respondents were classroom management, incorporating the standards into lesson planning, and differentiating instruction (Figure 15).

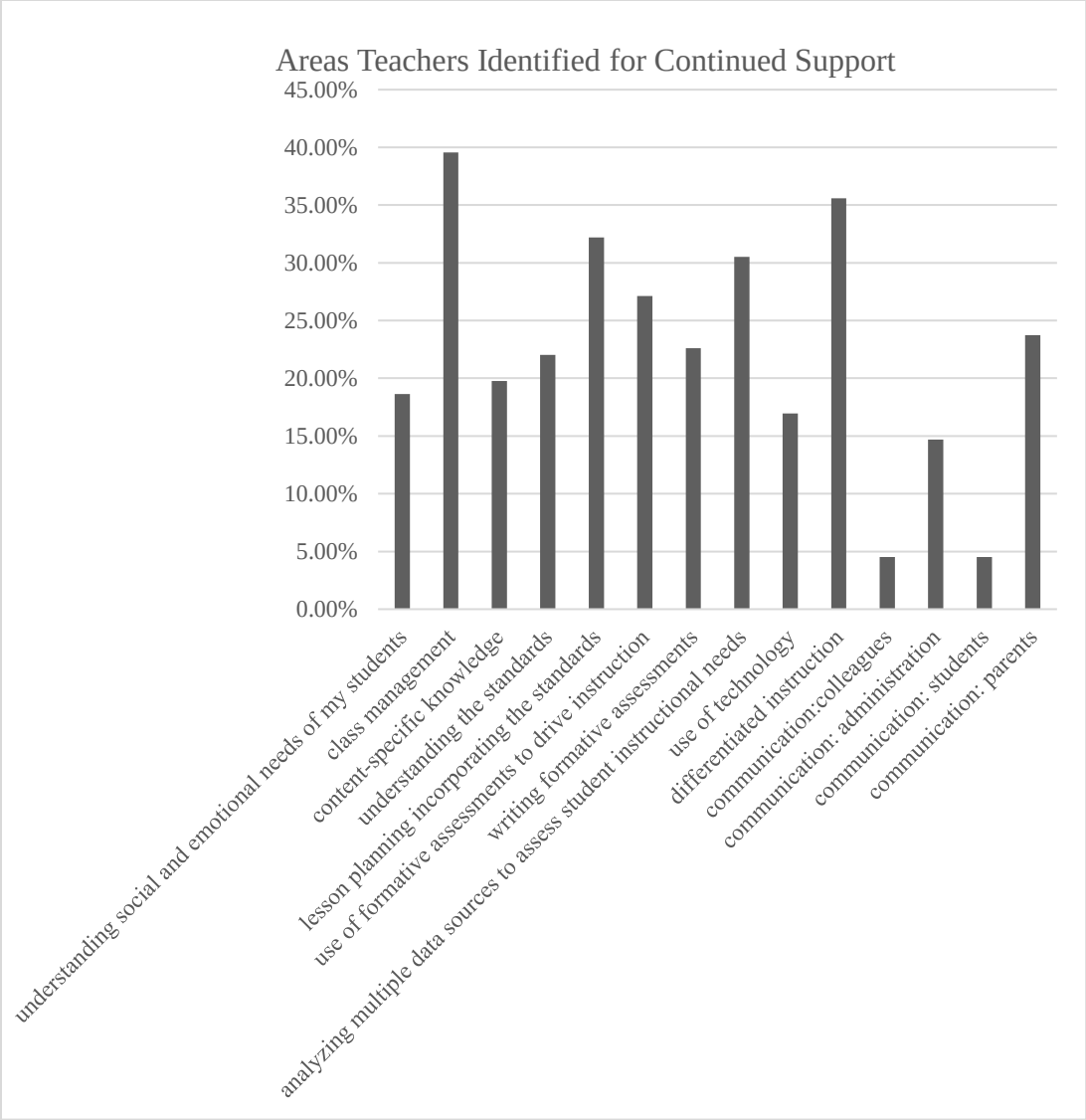

Figure 15. Continued Support Desired by Teachers (New Teacher Survey – Spring, 2017).

In addition, respondents were also asked to identify, from a list of eight areas of need identified by high-performing teachers, two ways their principals could keep them at their current schools (TNTP, 2012; Figure 16).

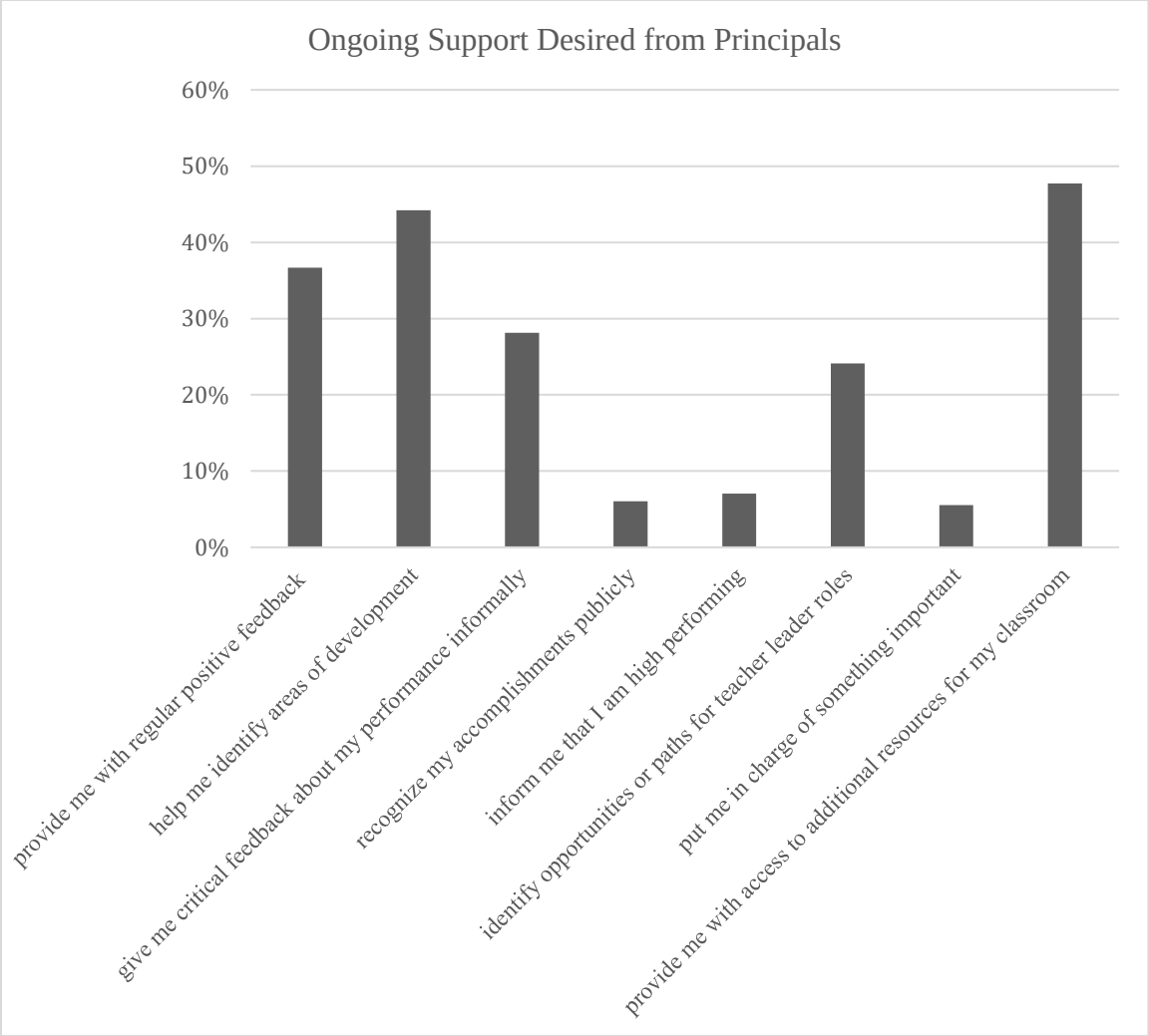

Figure 16. Ongoing Support Desired from Principals (New Teacher Survey – Spring, 2017).

The top two areas identified by teachers were *provide me with access to resources* and *help me identify areas of development*. The resources desired from teachers were not asked as a follow-up question; however, in the focus group, teachers noted the desire to observe other teachers as a necessary resource for first-year teachers.

Focus group. A focus group was convened after the review of the qualitative data was completed.

Focus group question development. Questions for the focus group (Appendix E)

were developed from the research questions and the themes that emerged from the spring survey quantitative and qualitative responses. The first, fifth, and sixth focus group questions aligned with Research Question 1: *How do novice teachers' perceptions of confidence for teaching change during their first year*? The second, third, fourth, and seventh focus group questions aligned with Research Question 2: *What support structures contribute to novice teachers' perceptions of job readiness?* Items 26, 29, 32, 35, and 37 on the spring survey were also reviewed by this researcher in order to identify themes for additional focus group questions. Figure 17 depicts the research questions along with the spring survey item that was asked in response to the research question, the code identified after the data were reviewed and triangulated, and the resulting focus group question.

RQ 1 or RQ 2	Spring Survey Item(s) #	Code Identified from Survey Data	Focus Group Question
1	7	Confidence	How did your confidence in your teaching skills change over the year? A. What do you attribute to any change or lack thereof? (Trainings, background, etc)
2	26	An effective mentor should be grade level or subject specific	Was your mentor familiar with your content area? In your experience is it possible to have an effective mentor who is not within your content area?
1 and 2	26, 29, 32, 35, 37	Other teachers are the predominant support structure	How did you approach areas that you did not know? For instance, if you were unsure about a school procedure, testing protocols, students with special needs, to whom did you ask questions? A. Were they helpful? B. Did you use this person all the time, or others for other types of questions?
2	26, 29, 32, 35, 37	No middle ground, how could support structures be helpful for all?	How beneficial were the support structures you received this year? A. How could they have been more beneficial?
1 and 2	26, 29, 32, 35, 37	I wish I had known . . .	Knowing what you know now and coming from the type of training you had prior to the beginning of the year, what do you wish you would have known before the start of the school year?
2	26, 29, 32, 35, 37	Open	Is there other information you would like to share?

Figure 17. Focus Group Question Development.

Focus group participants. First-year teachers' names and the path the teachers took to teaching (traditional certification or lateral entry) were entered into a spreadsheet, sorted by pathway, and paired with a number. Using a random number generator, participants were identified and asked by the induction coaches to participate in the focus group. The resulting focus group included six lateral entry teachers and four traditionally certified teachers. The group included five teachers working at the elementary level, one

teacher working at the middle school level, and four teachers working at the high school level. Further information about the demographic makeup of the focus group is represented in Table 27.

Table 27

Focus Group Demographic

	Male/ Female	Grade Level	Subject Area	Traditional/ Lateral Entry	African American, Asian, Caucasian
Teacher 1 (T1)	M	EL	PE	LE	AA
Teacher 2 (T2)	F	EL	2nd	LE	AA
Teacher 3 (T3)	M	HS	Math	Trad.	A
Teacher 4 (T4)	M	HS	ROTC	LE	AA
Teacher 5 (T5)	F	EL	5th	Trad.	C
Teacher 6 (T6)	F	MS	CTE	Trad.	AA
Teacher 7 (T7)	F	HS	EC	LE	C
Teacher 8 (T8)	F	EL	EC	LE	C
Teacher 9 (T9)	F	HS	Math	LE	C
Teacher 10 (T10)	F	EL	K	Trad.	AA

Focus group data. The focus group was held after school, a week prior to the end of the school year. All but one participant were present for the entire focus group session. Participants were informed their responses would be used for research purposes. After initial introductions, the participants' responses were recorded by a notetaker, transcribed by this researcher, and validated through triangulation and peer review (Creswell, 2014; Guion et al., n.d.). Figure 18 depicts the initial themes identified by this process.

Focus Group Question	Themes/Responses Lateral Entry	Themes/Responses Traditional	Themes/Responses Both
How did your confidence in your teaching skills change over the year? What do you attribute to any change or lack thereof? (Trainings, background, etc.)	Confidence decreased*; different than expected; felt alone	Confidence good overall; new ideas not accepted	Unfriendly environment; mentors important
Was your mentor familiar with your content area? In your experience is it possible to have an effective mentor who is not within your content area?	Asked for help, but did not receive from administrators and other teachers		Veteran teachers, mentors helpful for school in general, but not for instructional content
How did you approach areas that you did not know? For instance, if you were unsure about a school procedure, testing protocols, students with special needs, to whom did you ask questions? A. Were they helpful? B. Did you use this person all the time, or others for other types of questions?	Principal not helpful; assistant principal, curriculum facilitators helpful	Principals, other teachers, cooperating teachers helpful	Mentors were helpful; veteran teachers at other schools helpful
How beneficial were the support structures you received this year? A. How could they have been more beneficial?	Unsupported by peers; need to know how to plan lessons		Want to observe other teachers; collaborate with same subject teachers; too much PBIS; need classroom management help
Knowing what you know now and coming from the type of training you had prior to the beginning of the year, what do you wish you would have known before the start of the school year?	Need to know how to teach; how to write a lesson plan; and help with acronyms		Classroom management; staff is cold; want to collaborate with same subject teachers
Is there other information you would like to share?	Need to see a model lesson; teacher lack power; need training; students and teachers can be bullied		Document everything; Politics; student behavior is a challenge

Note. "Confidence," as measured by the fall and spring surveys, increased for lateral entry teachers.

Figure 18. Focus Group Initial Themes.

Teachers' reported sense of confidence varied throughout the year. Several lateral

entry participants indicated that they believed being a teacher assistant (TA) prior to having full responsibility for a classroom would have helped them, yet quickly realized it did not.

> I was a TA for 5 years and thought I knew everything. It was completely different than I expected. I was ready to quit at the beginning but I have a good grasp now. Doing it is the best way to learn.

This idea was reiterated by other lateral entry teachers who reported they had mistakenly believed that previous teaching experience would have been helpful: "I went in confident as I had taught after school classes and had a good grasp on relationships. When it was just me, it was hard. My year was like the phases sheet we got in training." Notably, during the focus group, lateral entry teachers reported a decline in confidence over time; however, when reviewing the phase sheet mentioned by the teachers, this researcher noted that the last three phases in the development of a first-year teacher during the school year changed from a low of disillusionment to a high of anticipation (Figure 19).

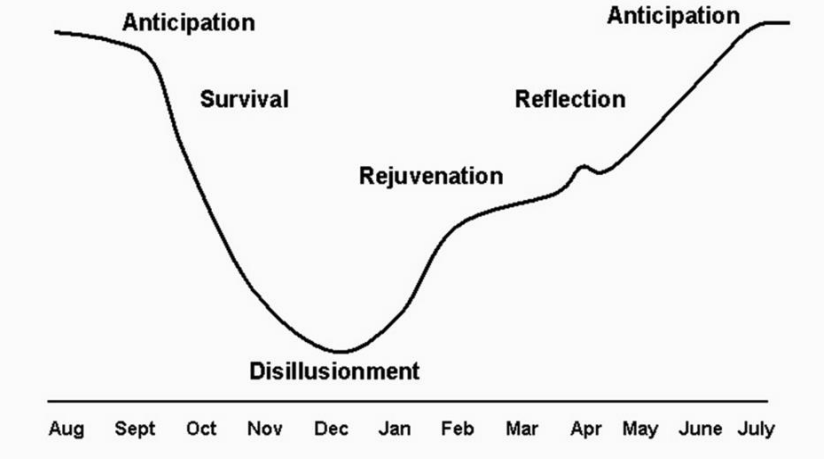

Figure 19. Phases of First-Year Teacher Development (NAAE, 2002).

Seven of 10 teachers reported that individuals in their schools were unfriendly toward them. Summing up the comments, one participant stated, "I went in confident. I had 26 years in the military and taught there. School is an unfriendly place for new teachers." Another participant stated,

> Super confident at the beginning, but not confident with paperwork. A parent did not want me as their child's teacher . . . I was not confident with speaking with parents. I wanted to try my own ideas, but other staff said, "We've always done it this way."

Concurring with the previous two statements, another participant reiterated this challenge of being a new teacher: "My confidence waivered throughout the year. Parents are overbearing, which was the most difficult thing. My cooperating teacher helped me the most. Staff is not friendly. The climate of building is not friendly."

In addition, both traditionally trained teachers and lateral entry teachers reported that having access to veteran teachers and having access to mentors who had experience in their grade level or content area were important for novice teachers' support and resources. In response to the questions, *was your mentor familiar with your content area? In your experience, is it possible to have an effective mentor who is not within your content area,* participants responded, "No. My mentor was a different grade level. She helped with methodology. I went to veteran teachers from other schools for help"; "No. I went to someone on a different hall. My cooperating teacher was also helpful"; and "Yes, but friends from my graduate program helped most, not mentor."

In response to the questions, *how beneficial were the support structures you received this year; how could they have been more beneficial?* and *knowing what you know now, and coming from the type of training you had prior to the beginning of the*

year, what do you wish you would have known before the start of the school year, one lateral entry teacher's response was echoed by four other lateral entry teachers,

> I was not treated like a real teacher because I was lateral entry. I needed to know how to teach and how to do lesson plans. Professional developments were great, but I didn't know what to do with them. I learned not to assume anything about procedures with students. I assumed they had been taught procedures before, so they would know. I learned I had to teach everything and model over and over again. I want to shadow teachers at other schools. My peers are not supportive of me.

Concurring, another lateral entry teacher stated, "I need to know how to do an effective lesson plan that engages students, and integrates small groups effectively."

Traditionally certified teachers reported needing a refresher on classroom management. One participant shared, "It was my first course in teacher training, then a year and a half later before I had to use it, and student teaching was not the same as having my own classroom." Lateral entry teachers concurred with this statement, indicating they "needed help with classroom management." However, four of the lateral entry teachers reported not liking the Positive Behavioral Interventions and Supports program (PBIS) that was in place at their school as they felt "Rewards were offered too late"; "Rewards were viewed as unattainable by some students"; and "It felt like propaganda coming over the loud speaker."

Both exceptional children's teachers reported they were "not confident with IEP paperwork." In addition, one exceptional children's teacher reported that she sought out assistance to learn the curricula expectations of her students. She stated that she went to her principal who "told me to go to PLCs but I had students all day and could not attend

any PLCs. I then asked for grade levels to send me their lesson plans, but only one grade level did throughout the year."

Responding to the question, *is there other information you would like to share,* first-year teachers' advice to other novice teachers included "do not assume anything with students." As stated earlier, two teachers elaborated that they had assumed students would know specific procedures or concepts given the students' ages or the knowledge of what the prior grade level covered. The new teachers indicated they had learned that all concepts and procedures had to be taught explicitly. They also expressed that new teachers "have to be prepared for politics" in schools. One respondent indicated, "you are judged by your scores, even when you don't have any scores. But, if you didn't provide me the tools, how can you judge my scores?" A different new teacher noted that discipline does not mean the same thing to a teacher as it means to administrators or district leaders: "listen to what the superintendent is saying – she wants students in schools, which translates to students knowing they won't get kicked out for behavior issues. Parents know that too, so you have to be prepared for the politics." Finally, another first-year teacher stated, "kids can do anything." Focus group members recommended that new teachers not set limits in their instruction or in their expectations of what a child can achieve.

In summary, five overall themes were developed from the focus group. The first theme was confidence varies throughout the year for all teachers. The second theme found was that mentors should teach, or have taught, the same grade level/subject area as the mentee. A third theme uncovered was that other teachers or mentors are the main source of knowledge, resources, and support for new teachers. Fourth, training and other teachers were mutually beneficial, though all requested additional training in classroom

management. Lateral entry teachers requested additional training in knowledge of teaching skills such as lesson planning and working collaboratively with peers in a team meeting. Finally, first-year teachers want to observe other teachers.

Chapter 4 Summary

This chapter detailed the results from the explanatory sequential mixed-methods design used to explore the research questions: How do novice teachers' perceptions of confidence for teaching change during their first year (Quantitative) and what support structures contribute to novice teachers' perceptions of job readinesss (Qualitative)? The data discussed represented two collections of quantitative data followed by qualitative results from an exploratory focus group (QUAN → qual). The results were displayed based on teachers' pathways to the classroom, traditional teacher certification or lateral entry, addressing the impact of teacher preparation on novice teachers' perceived readiness for the classroom.

Chapter 5: Discussion

Introduction

"Teachers want and need support to develop their practice so that their students can succeed" (Bill and Melinda Gates Foundation, 2014, p. 3), yet teachers make decisions to leave education when, as one teacher stated, she "began to feel that she was only supporting a failing system" (TNTP, 2012, p. 1). The state where this study was conducted has a 13% attrition rate for beginning teachers, five percentage points higher than for teachers not identified as beginning teachers (NCDPI, 2016). In 2016, the attrition rate for lateral entry teachers in the state was even higher, 16%, and Teach for America teachers' attrition rate was 33% (NCDPI, 2016).

Research completed by Darling-Hammond et al. (2002) and her colleagues suggested that novice teachers who felt well prepared to teach were more likely to remain in the profession than those who did not feel well prepared to teach. In addition, Ingersoll et al. (2014) found teachers who remained in teaching had "more training in teaching methods and pedagogy–especially practice teaching, observation of other classroom teaching and feedback on their own teaching" (Ingersoll et al., 2014, p. 1). This study investigated first-year teachers' perceptions of confidence to teach and identified support structures that could benefit new teachers.

Overview of Chapter 5

This chapter summarizes the study, provides the theoretical framework and research questions that guided the study, analyzes the data gathered from both surveys and the focus group, discusses the findings relating to the research questions and the Framework for Understanding Teaching and Learning (Darling-Hammond & Bransford, 2005), makes recommendations, and identifies implications for future research.

Summary of the Study

This mixed-methods research, conducted in a large urban district in North Carolina, collected quantitative data from two separately administered surveys and qualitative data from the spring survey and a focus group. Quantitative data were collected using a pre-post survey methodology. Participants were asked to complete the first survey at the beginning of their teaching career in the fall of 2016. One hundred forty-seven participants completed the fall survey. In March of 2017, the same group of first-year teachers was asked to complete a follow-up survey, along with additional first-year teachers who joined the district later in the year as well as other first-year teachers who had not received the first survey. One hundred ninety-nine participants completed the spring survey. Ninety-six of the 147 teachers who completed the survey in the fall also completed the survey in the spring; however, the survey collection tool did not provide a marker to align survey responses with individual teachers. Therefore, while a paired *t* test was desired for survey results, a two-sample *t* test was completed instead. Subsequently, a focus group was convened to further explore themes that emerged from the spring survey.

Research Questions

Two research questions guided this study.

1. How does novice teacher perceived readiness for teaching change during the first year? (Quantitative)
    a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness in teaching?
    b. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of learners and their

development in social contexts?

c. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of subject matter and curriculum goals?

d. How does traditional teacher certification versus lateral entry affect teacher perceived readiness in knowledge of teaching?

2. What support structures contribute to novice teachers' perceptions of job readiness? (Qualitative)

Data Analysis

Consolidated responses. Figure 20 depicts the comparison between traditionally certified teachers' and lateral entry teachers' highest and lowest reported ratings of readiness when reviewing the consolidated data. Bolded responses indicate that the response was the same for both traditionally certified and lateral entry teachers.

	Traditional	Lateral Entry
Most Confident	• **Teach students who were racially or culturally different than them** • **Contribute in a team collaborative meeting** • Use formative assessments	• **Teach students who were racially or culturally different than them** • **Contribute in a team collaborative meeting**
Least Confident	• Work with students with behavioral or mental health concerns • Plan lessons that were culturally responsive	• Manage student behavior • Differentiate instruction • Teach both high- and low-performing students

Figure 20. Comparison of Traditionally Certified and Lateral Entry Teachers' Ratings of Highest and Lowest Confidence.

Both traditionally certified teachers and lateral entry teachers reported a readiness to teach students who were racially or culturally different than them; however,

traditionally certified teachers also reported not being ready to plan lessons that were culturally responsive. Culturally responsive instruction has been defined as instruction that "empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (Ladson-Billings, 1994, pp. 17-18). The divergence between being confident to teach students who were racially or culturally different and being confident to plan lessons that were culturally responsive suggests further exploration into how teachers can develop and enact lessons that are culturally responsive may benefit both teachers and students. Cultural relevance challenges students and teachers to "see how what they learn in school can be applied in the real world" (Rea, 2015, p. 16) and provides educational equity. "Educational equity really is about giving students all the tools and support they need to be successful—recognizing that none of the kids are the same" (Rea, 2015, p. 20).

Research Question 1. How does novice teacher perceived readiness for teaching change during their first year (Quantitative)? This research question was broken into four components: teachers' overall perceptions of readiness for teaching, their perception of readiness for their knowledge of learners and their development in social contexts, their perception of readiness for the knowledge of subject matter and curriculum goals, and their perception of readiness for the knowledge of teaching. For each component, the findings are discussed after the research question is identified. In the fall, 147 teachers responded to the survey: 79 traditionally certified teachers and 54 lateral entry teachers. In the spring, 199 teachers responded to the survey: 89 traditionally certified teachers and 97 lateral entry teachers.

Research Question 1a. How does traditional teacher certification versus lateral entry affect teacher overall perceived readiness to teach? Data on Research Question 1a

were first analyzed based on the teachers' reported sense of overall perception of readiness on the fall or spring surveys. The raw data appeared to indicate teachers' overall readiness to teach changed over time for both traditionally certified teachers and lateral entry teachers. By further evaluating the data with both a chi-square analysis to determine if the type of teacher preparation could predict a teacher's reported level of confidence and a two-sample *t* test to evaluate if a significant difference occurred between the means of the respondents' answers in fall and spring, this study found no evidence of significant differences in the type of teacher preparation being a predictor of teacher confidence level of teachers' sense of confidence over time: Fall:χ^2 =.048, *df* = 1, *ns;* Spring: χ^2 =.1.955, *df* = 1, *ns*; traditionally certified teachers: t_{165} =0.87, p <.05; lateral entry teachers: t_{149} =0.21, p <.05.

Not having a meaningful change in a teacher's level of readiness over time could have important implications for students and school systems. Darling-Hammond and Bransford (2005) stated, "[A] student's assigned teacher has a much stronger influence on how much she learns than other factors like class size and composition" (p. 13). Therefore, teachers entering education with low readiness levels, no matter their credentials, may add to the achievement gap and may contribute to teachers leaving the profession (Ingersoll et al., 2014; Meador, 2016).

Readiness to teach can be observed and developed. The National Association of Special Education Teachers (NASET, n.d.) identified 10 characteristics of a teacher's personality, observable by instructors or principals, that pertain to teacher readiness and the development of self-confidence in students: "genuineness, fairness, organization, logic and common sense, ability to set clear boundaries, sense of humor, ability to give

compliments, ability to admit mistakes, willingness to listen and approachability" (pp. 2-4). Preparation programs for teachers, both college programs and lateral entry programs, can support the development of teacher confidence. Through careful development of the program, teacher preparation and lateral entry teacher programs can help novice teachers explore why they want to teach, learn what the day-to-day components of teaching are, develop specific educational goals and objectives for themselves, monitor their own instruction, implement active learning strategies, and recognize that learning to teach is an ongoing process and asking for help is a foundation for growth (Eison, 1990). Principals can also work with teachers with low confidence by sharing positive feedback and expressing gratitude (Meador, 2016). In addition, through the professional development plan, principals and teachers can collaborate on developing a teacher's strengths and providing suggestions for improvement that steps beyond identifying an area for growth and provides targeted solutions and action steps to facilitate the growth (Dweck, 2014; Meador, 2016).

Research Questions 1b-1d. While the data analysis for Research Questions 1b-1d was similar to Research Question 1a, data on Research Questions 1b, 1c, and 1d were comprised of responses to multiple items on the fall and spring survey rather than a single question.

Research Question 1b. How does traditional teacher certification versus lateral entry affect a teacher's perception readiness in knowledge of learners and their development in social contexts? To evaluate a teacher's sense of confidence in relation to his or her knowledge of learners, teachers were asked how confident they felt engaging students, differentiating instruction, teaching high- and low-performing students, and communicating with parents.

The raw data seemed to indicate that both traditionally certified and lateral entry teachers became less confident in their knowledge of learners over the year as evidenced by a decrease in confidence ratings from the fall survey to the spring survey, yet the chi-square analysis did not provide a significant result that would indicate teachers' sense of confidence in knowledge of learners was dependent on the type of teacher preparation; however, a significant value ($t600 = -5.28$, $p < .05$) was found between the means of lateral entry teachers' perceptions of confidence over time.

The implications of the significant difference in the means seems to indicate that lateral entry teachers enter education with more confidence about their knowledge of learners than they feel after 6 months of teaching, indicating that for the sample population, lateral entry teachers' sense of confidence about their knowledge of learners increases over the course of the year. Providing lateral entry teachers support throughout the year may help to maintain this result. In the words of one focus group respondent,

> I went in confident as I had taught after school classes and had a good grasp on relationships. When it was just me, it was hard. L[ateral] E[ntry] training was great - having a week of training then other meetings sprinkled throughout the year.

Providing support to teachers throughout the year benefits teachers and students. Support that is provided using coaching strategies after receiving explicit training sets teachers up for success by improving long-term use of effective strategies (Aguilar, 2013; Crane, 2014). Ongoing, transformative coaching provides teachers:

- The intrinsic satisfaction of accomplishing
- Emotional ownership of the work

- The opportunity to understand and contribute to goals that are meaningful to [the school]
- Feeling[s of] appreciation and [the knowledge] that they matter to the [school] they work for and the people they work with. (Crane, 2014, p. 28)

Darling-Hammond (2012b) suggested teachers, no matter their pathway to teaching, need to be able to respond to learners' needs. In education, responding to learner needs is identified as differentiation. Tomlinson (2013) explained differentiation is "responding to [the learners] readiness, interest[s and] learning profile" (p. 2): readiness identifies where a student is in relation to a learning target (Tomlinson, 2013); interest connects the learning target with the student's passions and cultural background (Tomlinson, 2013); and learning profile identifies how the students "take[s] in & processes information" (Tomlinson, 2013, p. 12). Providing teachers with training in differentiation that is accompanied by follow-up coaching to support teachers implementing the strategies learned will support novice teachers' readiness to teach and their growing knowledge of learners throughout their first year in the classroom.

Research Question 1c. How does traditional teacher certification versus lateral entry affect a teacher's perception readiness in knowledge of subject matter and curriculum goals? To evaluate a teacher's sense of confidence in relation to his or her knowledge of subject matter, teachers were asked how confident they felt teaching their grade level or content area, planning lessons that aligned with content standards, working with students with mental health challenges, and working with students with learning disabilities. Similar to the other two research questions, the raw data appeared to indicate that teachers felt more confident over time. On the chi-square analysis for this construct

in the fall, no significant difference appeared between the type of teacher preparation and a teacher's level of confidence (χ^2 = .332); however, in the spring, the value was significant (χ^2 = 15.704) indicating that the type of teacher preparation could predict teachers' sense of confidence in their knowledge of subject matter and curriculum goals. Equally, the two-sample *t* test yielded significant results for both traditional (t_{834} = 2.22, p <.05, *s*) and lateral entry teachers (t_{752} = 5.45, p <.01, *s*), indicating the type of teacher preparation could predict a teacher's level of readiness in knowledge of subject matter during his or her first year in the classroom.

Kruger and Dunning (1999) reported, "success and satisfaction depend on knowledge, wisdom, or savvy in knowing which rules to follow and which strategies to pursue . . . [and] people differ widely in the knowledge and strategies they apply (p. 1121). Focusing on teachers, a study conducted by MetLife agreed: "Most teachers (84%) are very confident that they have the knowledge and skills necessary to enable all their students to succeed academically" (Markow, Pieters, & Harris Initiative, 2010, p. 25). Furthermore, in this study, a teacher noted, "allow me to utilize my educational background to its full potential" (New Teacher Survey – Spring, 2017). Providing teachers who are confident in their abilities and whose abilities demonstrate success with the freedom to incorporate their knowledge demonstrates respect and may keep successful teachers in the profession as a lack of respect is a leading cause of teacher attrition (Ingersoll et al., 2014).

While teachers reported readiness to teach their grade level or content area, both traditionally certified teachers and lateral entry teachers reported they were not *confident in their ability to teach both high- and low-performing students, work with students with*

*behavioral or mental health concern*s, or *work with students who have learning disabilities*. Melnick, Cook-Harvey, and Darling-Hammond (2017) noted, "well-implemented programs designed to foster SEL are associated with positive outcomes, ranging from better test scores and higher graduation rates to improved social behavior" and "when classrooms are safe and engaging, and learning is both supported and rewarding, students feel connected and efficacious" (p. v).

Strategies to assist teachers in these areas should include an administrative focus on school climate that includes training on how to analyze school climate data and respond to the needs identified through "high-quality programs, professional development, and school organizational changes" (Melnick et al., 2017, pp. viii-ix). They concluded, "research suggests . . . that SEL (Social Emotional Learning) and a positive school climate are the foundation for students' academic and later-life success" (Melnick et al., 2017, p. ix).

Research Question 1d. How does traditional teacher certification versus lateral entry affect a teacher's perception readiness in knowledge of teaching? To evaluate a teacher's sense of readiness in relation to knowledge of learners, teachers were asked how confident they felt about managing student behavior, planning lessons that are culturally responsive, teaching students experiencing poverty, teaching students who were racially or culturally different than them, contributing in a team meeting, using formative assessment, analyzing data from assessments, and adapting instruction based on data analysis. The largest discrepancy between traditionally certified teachers and lateral entry teachers (15%) was demonstrated on the item, *I am confident in my ability to teach students experiencing poverty,* on the fall survey when lateral entry teachers reported a lesser sense of confidence than traditionally certified teachers; however, in the

spring, their reported sense of confidence exceeded traditional teachers by 5.7%.

The chi-square analysis did not yield a significant difference on the fall data but did yield a significant difference in the spring ($\chi^{2} = 9.384$, *df* = 1, *significant*), indicating teachers' sense of confidence could be predicted by their path to certification. The results demonstrated traditionally certified teachers' perceptions of readiness in knowledge of subject matter declined. Conversely, lateral entry teachers' perceptions of readiness of knowledge of subject matter increased. On the two-sample *t* test, a meaningful difference was not found for traditionally certified teachers ($t_{1338} = 1.8$, $p < .05$, *ns*) but did exist for lateral entry teachers' reported sense of confidence in relation to their knowledge of teaching over time ($t_{1204} = 5.68$, $p < .01$, *s*), supporting the chi-square results.

Bernard (2006) found that providing lateral entry teachers with training and coaching on the areas they identified as needs (classroom management, lesson planning, and teaching strategies) demonstrates respect, "the encouragement, support, and value for the profession necessary for anyone in any career" (para. 7). Respondents to Bernard's (2006) poll stated,

> What teachers need most of all . . . is respect . . . because when teachers are properly respected, the rest of what they need to be satisfied will come. . . . Intangible, yet indispensable, this sense that what they do is not only valuable but also valued, is what keeps -- or would keep -- teachers teaching. "Respect," writes Cheryl Rundle, a school social worker in upstate New York, "is the invisible thing that motivates you to get up every day and enter the building, find the keys in the bottom of your purse, unlock the door, and turn on the lights of the classroom." (para. 11-12)

Similarly, respecting teachers' knowledge and expertise aligns with Ingersoll et al.'s (2014) conclusion: "those with more pedagogy were far less likely to leave teaching after their first year on the job (p. 29). Pedagogy refers to the effective use of instructional strategies, classroom management strategies, and curriculum design strategies (Marzano, 2007). Fullan (2001) noted,

> Organizations that improve do so because they create and nurture agreements on what is worth achieving, and they set in motion the internal processes by which people progressively learn how to do what they need to do in order to achieve what is worthwhile. (p. 125)

Administrators can nurture the development of first-year teachers' skills in teaching by focusing on developing school culture (Fullan, 2001). Fullan (2001) recommended leaders set a moral purpose, understand the change process, develop relationships, share and create knowledge; and through the development of coherence, or the development of new patterns and relationships, "attract the energies and commitment of employees" (p. 115).

Research Question 2. What support structures contribute to novice teachers' perceptions of job readiness (Qualitative)? Teachers were asked to identify varying support structures on both the fall and spring survey. On the fall survey, teachers reported they needed administrative and instructional support staff to be supportive, to provide instructional resources, and to provide direction for additional support. On the spring survey, teachers echoed these sentiments. When asked to choose the two most important things their principal could do to provide support, all teachers who answered the question chose at least one of the following: *provide me with additional resources, provide me with regular, positive feedback, help me identify areas of development,* or

give me critical feedback about my performance informally. When asked to identify areas of support still needed from a list of 14 options, the top four items respondents indicated were *classroom management, differentiated instruction, lesson planning incorporating the standards*, and *analyzing multiple data sources to assess student instructional needs.*

In the focus group, similar themes emerged. Teachers reported that while their confidence waivered over the year, they went to mentors, other teachers in their school, or teachers in other schools for ongoing support. Lateral entry teachers reported needing to know how to teach. They expressed a desire for additional training on teaching methods and lesson planning and having the ability to observe highly effective teachers teaching. In addition, both lateral entry and traditionally trained teachers expressed a desire for additional training in classroom management. These data support the findings from Research Questions 1b, 1c, and 1d as, in addition to classroom management, most teachers reported a desire for additional training on differentiated instruction, analyzing multiple data sources to assess instructional needs, and the use of formative assessments to drive instruction. In her advice to novice teachers on classroom management techniques, Alber (2015) recommended teachers use their natural voice, wait for students to be quiet before relaying information, use nonverbal communication and hand signals when possible to gain student attention, respond to student misbehavior quickly, and ensure the lesson engages students. Additionally by incorporating differentiation strategies such as providing choice, developing lessons that engage students at their instructional level, addressing student learning styles, and motivating students to participate in the lesson, differentiation has been shown to address the needs of both high- and low-performing learners, address the needs of students with learning

disabilities, address the needs of students with behavioral or mental health concerns, address cultural and racial diversity, and manage student behaviors (Huebner, 2010).

Theoretical Framework

Darling-Hammond's Framework for Understanding Teaching and Learning "provides a set of lenses on any teaching situation that teachers can use to reflect on and improve their practice" (Darling-Hammond & Bransford, 2005, p. 10; Figure 21).

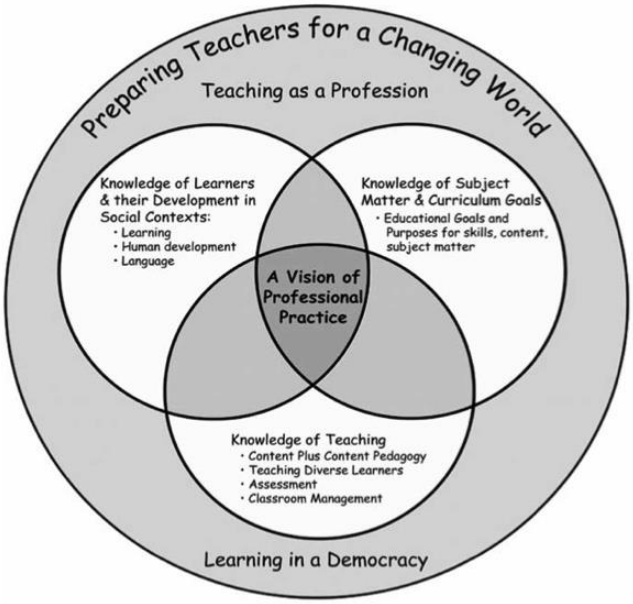

Figure 21. A Framework for Understanding Teaching and Learning. Reprinted from Constructing 21st Century Teacher Education by Darling-Hammond (2006).

Aligning with the framework, this study compared teachers' sense of readiness in understanding how learners develop, in understanding the subject matter and skills students need to learn to be productive members of society, and in understanding how to teach and how to assess student knowledge and growth based on teacher's educational pathway (Darling-Hammond, 2006, 2009; Darling-Hammond & Bransford, 2005). In addition to asking teachers to rate their overall sense of readiness as it related to each of

the lenses of the Framework (Darling-Hammond-2006), the study asked teachers to identify the types of support they felt were necessary in their first year of teaching and to provide information about reasons they might stay or leave the profession.

In the district where this study was conducted, new teacher turnover rates average 15% for all schools and up to 30% for schools with high rates of poverty (EDIPD, personal communication, July 14, 2017). In a review of the literature, teachers reported leaving teaching for multiple reasons. Some teachers feel marginalized or experience a "persistent disadvantage in education" (UNESCO, 2009, p. 5) to an extent where the marginalization has an impact on teacher job satisfaction (Kagan et al., 2001). Possible evidence of such marginalization was observed in one response on the spring survey (New Teacher Survey – Spring, 2017):

> The fact that I have no lunch break or bathroom breaks. There is no support in the actual classroom as far as assistance goes. I come to work early, stay late, and work on the weekends to complete all the work that is expected of me because there is not time set aside in the actual school day. I also feel like I am constantly being told what to do, yet never asked for my opinions or thoughts. Overall, I feel overworked and undervalued.

Similar marginalization themes relating to teacher working conditions, teacher expectations, and evidence of alienation were expressed by other survey respondents on the spring survey. Respondents noted, "the politics of education" (New Teacher Survey – Spring, 2017), the "overload of work related assignments that do not benefit the classroom or the students" (New Teacher Survey – Spring, 2017), and in response to *what would make you leave teaching*, one teacher wrote,

> If teachers are continued to be treated as less of a profession, not providing our

> students and children with the best education they need regardless of poverty or public schooling, not giving our most needy schools the funding they need to support their students and their community, not giving us teachers better pay that will not lead us to have to get a part-time job to cover our bills.

In contrast, teachers who reported they were likely to remain in education demonstrated more constructivist views (Lew, 2010; Plourde & Alawiye, 2003; Yost et al., 2000; Zakrzewski, 2012): "It seems simple but throughout the whole experience the students are the driving force behind every instructional decision. The love and support that each of these students needs has kept me focused throughout this challenging year" (New Teacher Survey – Spring, 2017). Other educators expressed similar constructivist views when asked to express what *would keep make you stay in teaching:* "continuing to see growth in my students, and forging connections with other educators" and "the desire to become a better teacher." Therefore, by providing teachers in the district where this study was conducted with the training and support identified as needed by the participants in this study, teacher attrition rates may decline.

Recommendations

As discussed in Chapter 1, the cost to school districts when teachers leave can be as much as $10,000 (Barnes et al., 2008). By providing high-quality resources to novice teachers, school systems could reduce the cost of attrition by 50% (Barnes et al., 2008). As teacher effectiveness increases over teachers' first 5 years (Goe, 2010), supporting the needs of novice teachers could also facilitate student growth (Barnes et al., 2008; Goe, 2010).

Teacher retention in the district and southeast state where this research was conducted is a priority. As teacher attrition has increased across the state and nation,

identifying ways school systems can retain high-quality teachers should become a priority for all districts (TNTP, 2012). The results from this study align with other, larger studies that seek to identify ways to keep both novice and high-quality teachers in the classroom. The recommendations that follow are based on two premises: First, teachers should be respected for their knowledge, skills, and abilities such that they are viewed as the instructional specialists in their classroom by administration and parents. Both descriptive data and *t*-test results demonstrated most teachers, especially lateral entry teachers, reported a strong sense of confidence about their knowledge of subject matter. Second, teachers want to develop their craft. When asked on the spring survey, *What can the district do to keep you,* one teacher responded, "provide Professional Development each year that is new and full of engaging ideas" (New Teacher Survey – Spring, 2017). Another stated, "provide opportunities to better myself though workshops" (New Teacher Survey – Spring, 2017).

Support for novice teachers. Support for teachers can range from a simple pat on the back to political restructuring. Survey and focus group responses provided a range of ideas that developed into four themes: (a) provide teachers with regular, positive feedback; (b) identify areas of development; (c) provide teachers resources; and (d) provide opportunities for teachers to observe other teachers.

Support for novice teachers should be differentiated based on the pathway to teaching the teacher took. Equally, support should be individualized based on teacher needs. Teachers want professional development and support that is "relevant . . . interactive . . . sustained over time . . . delivered by someone who understands [the teacher's] experience . . . [and] treats teachers like professionals" (Bill and Melinda Gates Foundation, 2014, p. 4). In the words of survey respondents, "require training only if it is

pertinent or allow teachers to choose which training would help them" (New Teacher Survey – Spring, 2017).

Support for understanding teaching and learning. Darling-Hammond and Bransford (2005) stated, "the importance of developing a strong profession of teaching has been reinforced by recent research demonstrating how important teaching is to children's learning and life chances" (p. 13). TNTP (2012) stated, "struggling teachers rarely improve, even when principals prioritize development" (p. 10) and "three out of four times, new teachers perform better in their first year than the low-performing teachers they replace and they are more likely to improve over time" (p. 10).

Therefore, using a structure to differentiate support systems for novice teachers can strengthen teachers and their impact on students over time. For instance, principals could develop a professional development matrix for each teacher based on their teaching pathway and areas of concern.

Knowledge of learners. Areas of need identified in the study in the area of knowledge of learners were differentiating instruction and teaching both high- and low-performing students. Professional development opportunities for first-year teachers should focus on the following areas of knowledge of learners: (a) how people learn; (b) develop a growth mindset (Dweck, 2014); (c) enhance the development of language (Darling-Hammond & Bransford, 2005); and (d) how to differentiate instruction for students (Tomlinson & McTighe, 2006),

Knowledge of subject matter. This study noted a relative decline in traditionally certified teachers' perceptions of readiness in knowledge of subject matter and a relative increase in lateral entry teachers' perceptions of readiness in knowledge of subject matter. Professional development opportunities for novice teachers should focus on

training and ongoing coaching in the implementation of differentiation strategies (Aguilar, 2013; Crane, 2014; Tomlinson, 2013) and developing a positive school culture (Fullan, 2001; Melnick et al., 2017).

Knowledge of teaching. Areas of need identified in the study in the area of knowledge of teaching were managing student behavior, planning lessons that were culturally responsive, and adapting instruction based on data analysis. Professional development opportunities should focus on (a) teaching diverse learners; (b) assessment as learning (Earl, 2013) or assessment for learning (Black, Harrison, Lee, Marshall, & Wiliam, 2011); and/or (c) classroom management techniques and intentional lesson planning that addresses student cultural diversity through (i) applying understanding by design principles in the classroom (Wiggins & McTighe, 2008), and/or (ii) designing real-world applications of knowledge problem-based learning (Hung, Jonassen, & Liu, n.d.).

Implementing a personalized learning plan for teachers that incorporates a training-coaching procedure and is based on growth mindset (Dweck, 2014) will provide teachers with a professional development model that is focused on responding to teacher needs and demonstrates respect for each teacher.

Personalized learning plans for teachers should be developed in collaboration with the first-year teacher, their principal, mentor, and other support personnel. Through the collaborative inquiry, teachers can identify areas of strength and areas of need. Then, teachers should be provided with access to resources, training, and ongoing coaching to nurture the development of the identified needs and cultivate inherent strengths. The personalized learning plan should be evaluated based on how a teacher incorporated the strategies learned in his or her classroom. While noted as an option for first-year teachers

in this study, the personalized learning plan could be incorporated for teachers of any level of experience.

Using classroom management, an identified area of need for all teachers in this study as an example, a teacher should first meet with either his or her principal, mentor, or support personnel (professional learning team member [PLTM]) to discuss strategies to improve classroom management based on the teacher's teaching style. Next, the teacher should be observed at different times of the day while implementing the strategies. Feedback, presented at the level of the teacher's developmental way of knowing (Drago-Severson & Blum-DeStefano, 2016), should be given to the teacher either during or immediately following the observation (Black et al., 2011; Earl, 2013) and should review the effectiveness of the strategy and how the strategy might be adapted to further meet teacher and student needs. If the teacher and PLTM feel the strategy is successful, a plan for check-in observation should be developed. If the strategy is not successful, the teacher and the PLTM should develop a new plan.

A new plan may include taking classes or workshops. If a class or workshop is recommended, the observation/feedback cycle should be implemented soon after the teacher returns from the first class to provide support and adjustment to the implementation of the strategy.

Support for teachers in general. First-year teachers completing the study identified the need for support through feedback, resources, and effective collaboration opportunities. Providing a structure for administrative leaders to provide this support, TNTP (2012) identified eight inexpensive strategies that principals can implement to increase teacher retention (Figure 22).

Feedback and Development	1. Provide me with regular, positive feedback
	2. Help me identify areas of development
	3. Give me critical feedback about my performance informally
Recognition	4. Recognize my accomplishments publicly
	5. Inform me that I am high performing
Responsibility and Advancement	6. Identify opportunities or paths for teacher leader roles
	7. Put me in charge of something
Resources	8. Provide me with access to additional resources for my classroom

Figure 22. Low Cost Retention Strategies for Irreplaceables. Adapted from TNTP (2012).

If a principal were to participate in the aforementioned personalized learning plan approach for first-year teachers, the principals would be providing regular positive feedback, identifying areas of development for teachers and providing critical feedback informally, and providing teachers with a necessary resource. Taking the process a step further, a principal could recognize a teacher's growth in a skill developed using the personalized learning plan publicly and possibly put the teacher in charge of leading others to develop the same or similar skills.

Teachers in the study identified collaboration with peers as both an area of strength (in the survey) and an area of need (in the focus group). Feeling respected for the knowledge and skills a teacher possesses has been discussed as a key ingredient to teacher retention. Equally, sharing ideas and strategies through rigorous professional learning communities has been shown to increase teacher satisfaction and student success (DuFour & Eaker, 1998). Teachers in the survey indicated they were confident in their ability to collaborate with peers; however, teachers in the focus group indicated that when

they attempted to share, their ideas were not respected or valued. Providing teachers with effective collaborative experiences using relevant, practical, and ongoing professional development may support teacher satisfaction and perceived sense of effectiveness (Bill and Melinda Gates Foundation, 2014, p. 16). Therefore, implementing personalized learning plans and a rigorous professional learning community process for teachers might increase the level of satisfaction with work, a perceived increase in effectiveness, and belief that the collaboration supports differentiation (Bill and Melinda Gates Foundation, 2014).

To implement a rigorous professional learning community in schools, districts need to do more than require weekly meetings. While time built into a teacher's weekly schedule is essential, a rigorous professional learning community should include shared responsibilities and the development of a positive, collaborative culture (Adler, 2002; Bill and Melinda Gates Foundation, 2014; DuFour & Eaker, 1998; Graham & Ferriter, 2010). Similarly implementing a professional learning community that respects and values all participants should include a vision for success, norms developed by the team to foster trust, and training regarding the professional learning community process and adult learning theory (Drago-Severson, 2009). In addition, the use of meeting protocols for varying meeting purposes: developing rigorous lessons or units, developing common assessments, collecting and analyzing data, and developing instructional strategies to respond to data analysis should be implemented (Adler, 2002; DuFour & Eaker, 1998; Graham & Ferriter, 2010). Finally, a shared notetaking process that explains the strategies implemented by the team and provides access to resources and documents progress and needs should be developed and shared with all professional learning community members (Adler, 2002; DuFour & Eaker, 1998; Graham & Ferriter, 2010).

Implications for Future Research

This study sought to examine teachers' sense of confidence in order to identify if a relationship existed between the pathway teachers take to teaching (traditional certification or lateral entry) and teachers' sense of overall confidence and confidence in relation to their knowledge of learners, knowledge of subject matter, or knowledge of teaching (Darling-Hammond, 2006). Through the analysis of the data, areas of need were identified for first-year teachers. Addressing these areas of need may support their overall perception of readiness in their first year in the classroom. Continuing to investigate teachers' sense of confidence and ways school systems can strengthen teacher confidence in their first year could be an ongoing study by school districts.

Additionally, follow-ups to a study similar to this could be undertaken by districts in order to correlate first-year teachers' reported perceptions of readiness to teach with their intention to remain in education, the reasons they may leave education, and how districts could support teachers in developing their teaching skills.

Further research that identifies the needs of traditionally certified teachers and lateral entry teachers should be conducted to ascertain if the data found in this report is generalizable to other school districts in this state and in the country.

Assumptions, Limitations, and Threats to Validity and Reliability

Assumptions. The purpose of this study was to examine teachers' sense of confidence in order to identify if a relationship existed between the pathway teachers take to teaching (traditional certification or lateral entry) and teachers' sense of overall confidence and confidence in relation to their knowledge of learners, knowledge of subject matter, or knowledge of teaching (Darling-Hammond, 2006). It was assumed that all teachers participating in the survey did so voluntarily and responded without influence

from supervisors. In addition, it was assumed that teachers clearly understood the items on the survey as well as those asked in the focus group.

Limitations. The study was limited to first-year teachers in an urban district in a southeast state. Therefore, generalizations to other districts in the state or nation may not be valid. In addition, the study did not control for daily influences that impact teachers: student pressures, parent pressures, administrative pressures, possible layoffs, etc. In addition, in a review of the archived fall data, the researcher noted that *Agree* did not appear to be a viable option for respondents to select, as none of the 147 respondents chose it on any of the survey items. This fact may have some impact on the study's findings. Finally, as both the spring and fall data were received over a 2-month period, specific measurements of a teacher's sense of confidence over a specific time period could not be made. When replicating this study for the future, the team decided to administer this survey to first-year teachers at their initial orientation meeting, in order to potentially identify additional areas of support they may need.

Another limitation of the study occurred when the researcher identified that a marker was not present on the survey tool to link teachers who completed the survey in the fall with data in the spring. While the researcher originally intended to explore teachers' sense of confidence in a one-on-one relationship, the researcher chose instead to use a general comparison of teachers' reported sense of confidence over time.

Threats to validity and reliability. While the overall survey results appeared to align with the results from focus group participants in this explanatory sequential mixed-methods study, external influences may have impacted the validity of the results: participant personal life, time factors, and job stressors. Similarly, while holding an impartial role, reminders may have impacted participant responses by creating a sense of

urgency. In addition, this researcher may not have considered all options for the explanation of the data or followed up on all areas that needed additional explanation (Creswell, 2014).

Reliability of the study may have been impacted by a district-wide force reduction that was announced near the end of the spring collection period. In the review of the qualitative response, however, only one participant noted a potential job loss. Efforts to strengthen validity and reliability of the survey and focus group data included repeated review of transcripts to ensure accurate data reporting, triangulation, peer review, and intercoder agreement (Creswell, 2014).

Chapter 5 Summary

This chapter discussed the findings from the mixed-methods study on new teachers' sense of being prepared for the classroom and identified potential support structures school systems could implement to provide new teachers focused professional development and support to increase the likelihood that new teachers will remain in education.

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Appendix A

New Teacher Survey – Fall

New Teacher Survey

(Items that were part of the survey, but not included in the study, are indicated where appropriate)

Please indicate the following information about your teaching assignment this Fall:

1. Question not included in this study

2. Grade(s) you will be teaching (*mark all that apply*)

K 1 2 3 4 5 6 7 8 HS

3. **For middle and high school teachers**, what subject(s) will you be teaching (*mark all that apply*):

_____ English/Language Arts

_____ Math

_____ Science

_____ Social Studies

_____ Art / Music / Dance

_____ Foreign Language

_____ Other – specify _____

Please provide the following information about your undergraduate education and teacher preparation program:

4. Undergraduate college major: _____

5. Highest degree earned to date:

_____ Bachelors

_____ Masters

_____ 6th Year Certificate

_____ Doctorate

6. Indicate your path to teacher certification:

_____ Traditional undergraduate teacher preparation program

_____ Master of Arts in Teaching (MAT)

_____ XXXXXXX ACT (Alternative Certification Track)

_____ Teach for America

_____ Other lateral entry program – specify: _____

7. Have you completed a teaching practicum, internship, and/or student teaching?

_____ No

_____ Yes

8. How long was the practicum, internship, and/or student teaching experience?

(*mark all that apply*)

Practicum

_____ One semester

_____ One full academic year

_____ Other – please specify _____

_____ N/A

Internship

_____ One semester

_____ One full academic year

_____ Other – please specify _____

_____ N/A

Student teaching

_____ One semester

_____ One full academic year

_____ Other – please specify _____

_____ N/A

9. **Question not included in this study**

10. Question not included in this study

For the following questions, please circle the number which best represents your feeling.

		Not at all Confident	Somewhat Confident	Confident	Very Confident
11.	Based on your teacher preparation so far, how confident are you that you are ready to teach?	**1**	**2**	**3**	**4**

Please respond to the following questions based on your preparation for teaching to date.

I am confident in my ability to . . .		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
12.	teach my grade level or content/subject areas.	**1**	**2**	**3**	**4**	**5**	**6**
13.	manage student behavior.	**1**	**2**	**3**	**4**	**5**	**6**
14.	plan lessons that align with content standards.	**1**	**2**	**3**	**4**	**5**	**6**
15.	plan lessons that are culturally responsive.	**1**	**2**	**3**	**4**	**5**	**6**
16.	engage students.	**1**	**2**	**3**	**4**	**5**	**6**
17.	differentiate instruction.	**1**	**2**	**3**	**4**	**5**	**6**
18.	teach both high- and low-performing students.	**1**	**2**	**3**	**4**	**5**	**6**
19.	teach students experiencing poverty	**1**	**2**	**3**	**4**	**5**	**6**
20.	teach students who are racially or culturally different from me.	**1**	**2**	**3**	**4**	**5**	**6**
21.	contribute in a team collaborative meeting.	**1**	**2**	**3**	**4**	**5**	**6**
22.	use formative assessments.	**1**	**2**	**3**	**4**	**5**	**6**
23.	analyze data from student assessments.	**1**	**2**	**3**	**4**	**5**	**6**
24.	adapt instruction based on data analyses.	**1**	**2**	**3**	**4**	**5**	**6**

25.	communicate with parents.	**1**	**2**	**3**	**4**	**5**	**6**
26.	work with students with behavioral or mental health concerns.	**1**	**2**	**3**	**4**	**5**	**6**
27.	work with students who have learning disabilities.	**1**	**2**	**3**	**4**	**5**	**6**

Please indicate the type of support you expect from the following people:

28. What support do you need from your administrative staff to be successful? (*mark all that apply*)

_____To listen

_____To have an open door

_____Be supportive

_____Be responsive

_____Provide direction for additional support

_____Provide resources

29. What support do you need from your curriculum facilitator to be successful? (*mark all that apply*)

_____To listen

_____To have an open door

_____Be supportive

_____Be responsive

_____Provide direction for additional support

_____Provide resources

30. What support do you need from your instructional support staff (induction coach, mentor, other teachers in your school) to be successful? (*mark all that apply*)

_____To listen

_____To have an open door

_____Be supportive

_____Be responsive

_____Provide direction for additional support

_____Provide resources

Items 31 – 35 are not included in this study

Thank you for your time in taking this survey.

Appendix B

New Teacher Survey – Spring

New Teacher Survey – Spring 2017

(Items that were part of the survey, but not included in the study, are indicated where appropriate)

Please indicate the following information about your teaching assignment this year:

1. Did you complete a new teacher survey this past fall? ____Yes ____No

2. Grade(s) you are teaching (*mark all that apply*)

K 1 2 3 4 5 6 7 8 HS

3. **For middle and high school teachers**, what subject(s) are you teaching (*mark all that apply*): **(Question not included in this study)**

Please provide the following information about your undergraduate education and teacher preparation program:

4. Highest degree earned to date:

_____ Bachelors
_____ Masters
_____ 6th Year Certificate
_____ Doctorate

5. Are you a Teach for America teacher?
____Yes ____No

6. Indicate your path to teacher certification:

_____ Traditional undergraduate teacher preparation program
_____ Master of Arts in Teaching (MAT)
_____ XXXXXXXX ACT (Alternative Certification Track)
_____ Other lateral entry program – specify: _____

Please select the number that best represents your feeling.

	Not at all Confident	Somewhat Confident	Confident	Very Confident
7. Based on your teaching experience this year, how confident are you in your teaching ability?	1	2	3	4

Please respond to the following questions based on your experiences to date.

I am confident in my ability to . . .	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
8. teach my grade level or content/subject areas.	1	2	3	4	5	6
9. manage student behavior.	1	2	3	4	5	6
10. plan lessons that align with content standards.	1	2	3	4	5	6
11. plan lessons that are culturally responsive.	1	2	3	4	5	6
12. engage students.	1	2	3	4	5	6
13. differentiate instruction.	1	2	3	4	5	6
14. teach both high- and low-performing students.	1	2	3	4	5	6
15. teach students experiencing poverty	1	2	3	4	5	6
16. teach students who are racially or culturally different from me.	1	2	3	4	5	6
17. contribute in a team collaborative meeting.	1	2	3	4	5	6
18. use formative assessments.	1	2	3	4	5	6

19. analyze data from student assessments.	**1**	**2**	**3**	**4**	**5**	**6**
20. adapt instruction based on data analyses.	**1**	**2**	**3**	**4**	**5**	**6**
21. communicate with parents.	**1**	**2**	**3**	**4**	**5**	**6**
22. work with students with behavioral or mental health concerns.	**1**	**2**	**3**	**4**	**5**	**6**
23. work with students who have learning disabilities.	**1**	**2**	**3**	**4**	**5**	**6**

24. How often have you met with your Mentor?

_____Daily
_____Twice a week
_____Weekly
_____Every other week
_____Once a month
_____Occasionally
_____Never

25. How helpful was the support you received from your Mentor?

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful
1	**2**	**3**	**4**

26. Please explain your rating.

27. How often have you met with your Principal/AP?

_____Daily
_____Twice a week
_____Weekly
_____Every other week
_____Once a month
_____Occasionally
_____Never

28. How helpful was the support you received from your Principal/AP?

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful
1	2	3	4

29. Please explain your rating.

30. How often have you met with your Induction or ACT Coach?

_____Daily
_____Twice a week
_____Weekly
_____Every other week
_____Once a month
_____Occasionally
_____Never

31. How helpful was the support you received from your Induction or ACT Coach?

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful
1	2	3	4

32. Please explain your rating.

If you are TFA please answer questions #33-35. If you are not TFA, please go to question #36.

33. .How often have you met with your Teach for America Coach?

_____Daily
_____Twice a week
_____Weekly
_____Every other week
_____Once a month
_____Occasionally
_____Never

34. How helpful was the support you received from your TFA Coach?

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful
1	2	3	4

35. Please explain your rating.

36. Who else have you received support from as a new teacher?

37. Out of all your support sources this year, which has been the most beneficial? Please explain why.

38. Which **Right Start** training session did you attend? (Choose one)

    (Question not included in this study)

39. How helpful did you find the Right Start training? **(Question not included in this study)**

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful	Did Not Attend
1	2	3	4	NA

40. Please explain your rating. **(Question not included in this study)**

41. Which **Lateral Entry** training session did you attend? **(Question not included in this study)**

    _____10 day training in the summer before school started

    _____5 day training after the start of school

    _____NA (If NA skip to question #44)

42. How helpful did you find the lateral entry training? **(Question not included in this study)**

Not At All Helpful	A Little Helpful	Fairly Helpful	Very Helpful	Did Not Attend
1	2	3	4	NA

43. Please explain your rating. **(Question not included in this study)**

44. What other professional development sessions did you attend that were beneficial? Please list the session topic, the provider, and the location. **(Question not included in this study)**

Session	Provider	Location

45. In what areas do you still need support? (*Mark all that apply*)

_____understanding the social and emotional needs of my students
_____class management
_____content-specific knowledge
_____understanding the standards
_____lesson planning incorporating the standards
_____use of formative assessments to drive instruction
_____writing formative assessments
_____analyzing multiple data sources to assess student instructional needs
_____use of technology
_____differentiated instruction
_____communication with colleagues
_____communication with administration
_____communication with students
_____communication with parents
_____other (please specify)
_____

46. Do you plan to stay in teaching?

Definitely No	Most Likely No	Not Sure	Most Likely Yes	Definitely Yes
1	2	3	4	5

47. What would make you stay in teaching?

48. What would make you leave teaching?

49. From the list below, choose the *two* most important things your principal can do to keep you at your current school. (*Choose two*)

_____provide me with regular positive feedback
_____help me identify areas of development
_____give me critical feedback about my performance informally
_____recognize my accomplishments publicly
_____inform me that I am high performing
_____identify opportunities or paths for teacher leader roles
_____put me in charge of something important
_____provide me with access to additional resources for my classroom

50. What can the district do to keep you in XXXXXX?

51. Please share any additional information about your teaching experience with XXXXXXX.

Thank you for your time in taking this survey.

Appendix C

Pilot-testing Feedback

Re: updated new teacher survey

Inbox x

Pritchard, Kathryn < > Aug 26

to New teacher survey team

Hello,

The pilot-test went very well!

Three teachers took the survey: One teacher who took the traditional path to licensure, one who was lateral entry, and one who was in the last group of teaching fellows (but has a traditional licence); 2 female teachers, 1 male; 2 White, 1 African American

Of the three teachers taking the survey, one finished in 5 minutes, one in 6 and one in 10. The one that finished in 10 said 'I am a slow test taker.'

There were two comments on the survey items:

Question 8: One teacher did not consider her internship in her answer as she said those experiences were distinctly different (in her internships, which she had from the beginning of her program, she graded papers, and covered the class only if a teacher was asked to go to a meeting, she only taught in her student teaching)

Question 9: One teacher was not clear on how to whether to mark ”mixed student body,” versus “diverse

student body," her suggestion was to say instead "representative of XXXXXXX demographics" (which is what we say when we discuss our demographic profile at our school)

2 teachers commented on the last question:

1. "Manipulating the application website is not user friendly - Google automatically takes you to the old application site"

2. The benefit instructional/tutorial should be more thorough. And the licensing process should be clearer. Maybe a tutorial for lateral-entry teachers"

One teacher skipped the question on how long it took for HR to contact her, as she did not remember.

For my study, refining question 8 would be beneficial based on the feedback: The suggestion from the teachers was to split the question into:

How many semesters did you participate in a practicum experience? (options: 1 - 6)

How long was your internship? (1 semester, 1 year, other)

How long was your student-teaching experience? (1 semester, 1 year, other)

That would then mean that question 7 should have "practicum" listed before "internship"

Let me know your thoughts.

Kathryn

Kathryn Pritchard

Appendix D

Email Message Inviting Survey Participants

Dear New Teacher,

Thank you so much for joining the XXXXXX family. We are proud to have you as our newest member and look forward to learning from you, sharing with you, and supporting you as you strive to ensure all children receive a quality education and have an effective support system.

To improve our efforts to support new employees, we are requesting that you take part in a survey that will give us critical feedback on the services and support we provide to new teachers. This survey is very important to our ability to improve and to create the best possible learning and teaching environment that we can. You will also be asked to complete a similar survey again at the end of the school year and may have a similar survey mid-year as well.

We need your honest, frank feedback. Your perspective is crucially important to us. The survey will take approximately 10-15 minutes to complete. We know that this is a lengthy survey, but your input is valuable and highly important to us. Some of the data may be used for research purposes, but all of the data will be used to determine how we can better support our new hires. We will not provide the feedback directly to your supervisor, but may combine data from across the District to provide feedback to all principals or other district leaders on ways we can better support our new teachers.

Again, we cannot express how important your feedback is and how much we appreciate your time. You are a valuable member of our team and we look forward to supporting you this year.

Sincerely,

Executive Director of Professional Development

Executive Director of Human Resources

Appendix E

Focus Group Questions

Focus Group Questions

Opening Question/Statement:

Thank you for your willingness to participate in this focus group. Your answers here are completely confidential. With your permission, themes that emerge from this meeting will be included in a dissertation and shared with the induction and success department, principals, and the human resources department. At no point will names or other information be provided that may identify you. Please tell us a little about yourself and what prompted you to participate in this discussion?

Demographic questions:

- What grade level/subject area do you teach?
- Are you a lateral entry or traditionally certified teacher?

Questions for focus group:

1. How did your confidence in your teaching skills change over the year?
    a. What do you attribute to any change or lack thereof? (Trainings, background, etc)
2. Was your mentor familiar with your content area? In your experience is it possible to have an effective mentor who is not within your content area?
    a. Tell me about that
3. How did you approach areas that you did not know? For instance, if you were unsure about a school procedure, testing protocols, students with special needs, to whom did you ask questions?
    a. Were they helpful?
    b. Did you use this person all the time, or others for other types of questions?
4. How beneficial were the support structures you received this year?
    a. How could they have been more beneficial?
5. Knowing what you know now and coming from the type of training you had prior to the beginning of the year, what do you wish you would have known before the start of the school year?
6. Knowing what you know now and coming from the type of training you had prior to the beginning of the year, what advice would you give a first- year teacher?
7. Is there other information you would like to share?

Closing Statement:

Thank you for your openness, honesty and candid responses. If you would like to share additional information relating to the items we have discussed here, please follow-up with your induction coach. Again, all answers you provided here will remain confidential. While some responses may be included in a dissertation, at no time will any specific reference be provided that may identify your response. You have provided a lot of information for me to review. Again, thank you!