

**EVALUATING THE EFFECTIVENESS OF AN INDUCTION AND MENTORING
PROGRAM ON NOVICE EDUCATORS' TEACHING EFFICACY AND IMPACT ON
PEDAGOGICAL SKILLS**

A Record of Study

by

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ABSTRACT

An essential part of novice teachers' development of pedagogical and classroom management skills in a district is a supportive induction and mentoring program (Ingersoll & Strong, 2011). Novice teachers can combat the challenges that directly contribute to dissatisfaction with the teaching profession, attrition rates, and an overall teacher shortage by implementing a successful induction and mentoring program (National Center for Education Statistics, 2014).

This study intended to understand the effectiveness of an induction mentoring program on novice teachers' efficacy and the impact on pedagogical skills based on varying levels of support provided and which components were implemented. The participants in the study included novice teachers and the coordinator for the induction and mentoring program in a low socioeconomic school district in East Texas. Data were collected in May of the 2020-2021 school year.

This study was an explanatory sequential, mixed methods action research study that examined novice teachers' perceptions in 2020-2021 during the inaugural year of the induction and mentoring program. An instrument known as the Teacher Efficacy Scale survey created by Gibson and Dembo (1984) and later modified by Woolfolk and Hoy (1990) was administered to the novice teacher participants. The Teacher Efficacy Scale survey was administered to study the teacher induction and mentoring program's effects on teaching efficacy (Woolfolk & Hoy, 1990). In addition, demographic information was collected from novice teacher participants. Quantitative data was collected from the demographic information and survey of novice teachers. The qualitative data was gathered from the semi-structured questions administered to participants in the focus groups and data collected from the district induction and mentor

coordinator to analyze the perceptions of teaching efficacy and elements of the induction and mentoring program that impacted the development of pedagogical teaching skills. The results did not reveal any statistically significant data. However, the results informed the district leaders of the novice teacher's perceptions regarding the induction and mentoring program and provided suggestions for future development.

DEDICATION

To my husband, Sterling. The completion of my research would never have been possible without your support. You have always encouraged me to do more than I have ever thought possible. Thank you for making our world work as I fulfilled my goal of a doctoral degree.

To my parents, Billy and Tammy. You believe I can reach goals even though I am not sure I can achieve them. The unconditional support and love I receive from you has allowed me to achieve more. You have been proud of my success through the years, both big and small. Above all, you have shown that hard work is possible if you keep family at the focus of what you do.

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To my children, Emilie and Hayden. You are my most significant accomplishment in this world. Your education is so important. I hope to set an example of how you can set your mind to a goal and you can accomplish big things! I love you both.

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CONTRIBUTORS AND FUNDING SOURCES

The work in the study was overseen by the committee chair and committee members. The study was completed independently by the researcher. There were no outside funding sources for the study.

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CHAPTER I

INTRODUCTION

The Context

Teacher quality matters. The preparation and professional development of teachers directly affect the ultimate goal of schools: improving student achievement. However, effective teachers fully prepared to deal with the demands of the classroom are a limited resource, especially in low-income areas. Because experienced and qualified teachers are scarce, many administrators can find school staffing challenging. Schools hire novice teachers from both traditional and alternative certification backgrounds. These novice teachers enter the profession without the practical classroom experience necessary to address students' academic and social-emotional needs effectively. Compounding the situation, novice teachers exhibit gaps in knowledge between theory and practice; these gaps are often exacerbated by a lack of professional on-the-job support that provides skills essential to becoming effective (Haynes, Maddock, & Goldrick, 2014). To address these deficits, districts respond with increasing frequency to novice teacher needs through induction and mentoring initiatives. According to Wong (2004), "Induction is a...training and support process that continues for two or three years and then seamlessly becomes part of the lifelong professional development program of the district to keep new teachers teaching and improving toward increasing their effectiveness" (p. 42). The more intensive the induction program, the greater the benefits to novice teachers' success and student achievement in the classroom (Ingersoll & Strong, 2011; Rockoff, 2008).

An essential component of an intensive induction program that must be a priority is mentoring (Ingersoll, 2004). More than 80% of districts that offer induction programs include individualized guidance and support from a veteran mentor teacher (Ingersoll, 2004). Without an

induction and mentoring program, novice teachers are often not given the necessary support to instill sustained change in the district. However, by implementing an effective induction and mentoring program, the district can develop novice educators' knowledge and skills from their current teaching competence into the master teacher needed for teacher and student success in the classroom.

National Context

Novice teachers, defined as having three or fewer years in education (National Center for Education Statistics, 2014), face challenges that directly contribute to dissatisfaction with the teaching profession, attrition rates, and an overall teacher shortage. This shortage of new teachers is a significant concern (Ingersoll & Strong, 2011). According to the Schools and Staffing Survey (SASS), novice teachers leave the profession at a higher rate because they will transfer campuses within the same district or exit the profession (Ingersoll & Smith, 2003; National Center for Education Statistics, 2016). With 3.3 million teachers in the United States, over 400,000 new teachers have less than three years in education (National Center for Education Statistics, 2014). The National Center for Education Statistics (2014) separates teachers into categories, including those who stay on their campus, those who will move from the campus but remain in the profession, and those who will leave the education field. Of the 400,000 novice teachers, the number of movers with three or fewer years in education is 12 percent (National Center for Education Statistics, 2014). Those who leave the profession are over 7 percent (National Center for Education Statistics, 2014). Combining novice teachers categorized as those teachers who choose to leave and those who decide to move yields a staggering 20% of novice teachers leaving their campuses each year (National Center for Education Statistics, 2014).

The most concerning is the number of teachers who are movers and leavers in urban areas and rural areas have steadily risen between 2008-09 to 2012-13 school years, contributing to the turnover rate and inconsistency in staff on campuses (National Center for Education Statistics, 2010; 2014). More than half of the United States teachers are from urban and rural areas (National Center for Education Statistics, 2014). According to the United States Census Bureau (2020), a population of 50,000 or greater is considered "urbanized areas," or inner city. In contrast, a population of 2,500 to 50,000 is considered a suburban area surrounding urban areas to create "urban clusters" (United States Census Bureau, 2020). Rural areas are all other areas not included in urban areas (United States Census Bureau, 2020). Considering the inner city, urban areas, and rural areas, the number of teachers who move or choose to leave has seen the most significant growth (National Center for Education Statistics, 2014). In 2008-09, over 70,000 leavers in urban areas and over 70,000 leavers in rural areas yielded more than 140,000 teachers who moved from their campuses (National Center for Education Statistics, 2010). Teacher attrition has steadily increased to well over 10 percent each in urban and rural areas during the 2012-13 school year (National Center for Education Statistics, 2014). It is important to note that some turnover is healthy and necessary (Smith & Ingersoll, 2004). In addition, turnover can also be attributed to those who leave the profession for more than five years due to family or relocation.

Consequently, teacher turnover rates in high-poverty schools are rising (National Center for Education Statistics, 2010; 2014). Teachers who transferred schools or exited the education profession in urban, inner-city schools with high poverty levels increased from 15 percent in 2008-09 to over 22 percent in 2012-13; turnover has grown at almost the same rate in rural areas (National Center for Education Statistics, 2010; 2014). According to Smith & Ingersoll (2004),

when the number of students who are economically disadvantaged increased from 25 percent to 75 percent, the number of novice teachers leaving the district increased by more than 50 percent.

When the Every Student Succeeds Act was passed in 2015, it reinstated the Elementary and Secondary Education Act policies, which emphasized recruiting, coaching, and retaining high-quality teachers to improve overall teacher quality (U.S. Department of Education, 2015). Many factors affect teacher quality including background, demographics, skills entering the profession, SAT and ACT scores, teacher certification type, and exposure to experiences in education such as student teaching (Kaplan & Owings, 2001). Teacher quality has the most significant impact on student achievement (Borman & Dowling, 2008; Darling-Hammond, 1997; Darling-Hammond, 2009; Feiman-Nemser, Schwill, Carver, & Yusko, 1999).

While teachers have a significant role, novice teachers do not generally possess the level of teacher quality necessary to develop student learning and achievement to the levels required for student success (Haynes, Maddock, & Goldrick, 2014). This further solidifies the need for increased support of novice teachers, including preparation, professional development through induction, and mentoring to increase novice teachers' retention at the campus level (Ingersoll & Smith, 2004). When novice teachers receive support through induction, they are less likely to experience isolation (DuFour, 2011; Lortie, 1975) and less likely to feel overwhelmed (McCann & Johanessen, 2004). In addition, novice teachers participating in an induction program are more content with their current employment and have a greater chance of continuing in the education profession (Ingersoll & Strong, 2012; Smith & Ingersoll, 2004). Without such support, novice teachers have a greater chance of leaving the education profession, contributing to the rising turnover rate of teachers (Podolsky et al., 2017).

As educators develop their pedagogical skills and improve their capacity, novice teaching efficacy also plays an essential role in the novice teacher's outcome within the classroom (Guskey & Passaro, 1994). Teaching efficacy is based on the educators' belief they can make a difference in student achievement even with the most challenging students (Bandura, 1997; Gibson & Dembo, 1984; Guskey & Passaro, 1994). The effects of teaching efficacy include the amount of time and energy an educator will devote to improving student performance and their dedication to their role as teachers (Bandura, 1997; Gibson & Dembo, 1984).

Additional factors that affect novice teachers' performance and effectiveness include school context and the geographic location of the school: urban, rural, and suburban settings (Knoblauch & Hoy, 2008). Rural and urban schools pose unique challenges that affect teacher quality and efficacy (Knoblauch & Hoy, 2008). Urban schools will see challenges, including students identified with low socioeconomic status, differences in culture and class, lack of resources, discipline, violence, and poor teacher quality (Knoblauch & Hoy, 2008). Teachers are less likely to be drawn to schools in urban or rural areas (Darling-Hammond, 2017). Turnover rates are highest for small, rural, and urban schools with high-minority, low-income, and a more significant concentration of students of color (Darling-Hammond, 2017). Teachers at schools with students of color, high-minority, and low income are frequently inexperienced and do not possess as much educator training (Darling-Hammond, 2017). Further, novice teachers who find themselves employed in an urban or rural school do not stay an extended amount of time due to the additional issues they face compared with suburban schools (Knoblauch & Hoy, 2008). Novice teachers' quick entrance and exit further exacerbate low student achievement in high-needs schools where students learn from the least prepared teachers (Knoblauch & Hoy, 2008).

Currently, 31 states mandate induction programs to provide support and potentially reduce the high turnover of novice teachers leaving the profession at campuses that need high-quality teachers the most (Education Commission of the States, 2019). Though research shows novice teachers achieve the most significant gains with sustained support, Texas recently repealed its Beginning Teacher and Induction Mentoring program mandate (TEA, 2020). Subsequently, TEA recently approved the optional Mentor Program Allotment through House Bill 3 (TEA, 2020). By implementing mentoring and induction, districts can better support novice teachers who arrive in classrooms unprepared to meet the students' needs (Berry, Rasberry, & Williams, 2010). This optional program provides districts an avenue to support novice teachers with mentors and provides some monetary compensation (TEA, 2020).

Personal Context

I made a choice more than 20 years ago to follow the traditional education route and join millions of educators in the United States. My first teaching position was at a low socioeconomic, urban elementary school with diverse learners. While I loved my time with the students, I was not comfortable adjusting to their needs because my personal education experience was at a more affluent, rural school before college. During my internship in the preservice educator program, my interactions with students were limited and consisted of a few hours a day, followed by a written reflection. I never truly experienced the full spectrum of teaching during these limited interactions. As a new teacher in the education field, I was unprepared for the unique challenges of education and students whose experiences differed significantly from mine and struggled with knowing where to turn for help.

I struggled through my first two years of teaching, completing daily tasks but never advancing my pedagogical knowledge or teacher capacity. At the beginning of my third year, I

considered leaving the education profession and finding a new career path. Little did I know that a visit from the district's literacy coordinator would change my perception of teaching forever. During one of her visits, we had a discussion where I confided in her about the frustrations I felt about the profession and feelings of inadequacy in meeting the administration's expectations and my students' needs. She offered me the opportunity to be part of an early literacy course sponsored by a nearby university. For the program's duration, I had regular visits from the district literacy coordinator, during which she offered advice, support, and the resources to achieve success in my classroom. In reflection, I realize the literacy coordinator's decision to include me in the program was the turning point in my educational career. Without the support from a master teacher, I would have long ago become another growing statistic in the ever-increasing novice teacher attrition rate.

Researcher's Roles and Personal Histories

My professional education experience has been filled with a wide range of opportunities at various grade levels and schools. Since 2002, I have taught in three different public schools and grade levels ranging from 1st through 12th grade in urban and rural schools. At the beginning of my career, I lived in a suburban area and taught in an urban, high minority, low-income school. The district where I was employed was a large school district that received additional funding through Title I, a federal program offering assistance to districts with a low-income student population greater than 40% and eligible for free and reduced lunch programs (Parrett & Budge, 2012). Working in a large urban school district gave me more access to a qualified mentor and the university's support. Being an employee of a larger district also allowed me to work on my master's degree in educational administration with tuition reimbursement. After

several years in the classroom, I took a few years off to stay at home with my children.

Eventually, I moved back to my hometown to live and work in a nearby rural school district.

Returning to the workforce, I had a renewed interest in education. I taught math in middle school and later moved to high school. Soon after, I accepted a position as an assistant principal at a high school in a rural school district classified as Title I based on federal guidelines (Parrett & Budge, 2012).

Three years later, I transitioned to principal at the 5th and 6th-grade campus in the same Title I school district, where I currently remain employed. I gained a different perspective on the novice teacher's struggles in this role. I learned material resources and professional development and support are not as accessible in a rural school as in a large, urban school district. With little help provided to novice teachers on my campus, I observed teachers exerting a tremendous effort just to move through the menial tasks of each day. Paperwork, meetings, and classroom discipline consumed excessive time with little professional support and few accessible resources. Novice teachers' energy was focused on low-return, non-teaching activities rather than improving their teaching skills.

Journey to the Problem

While I experienced frustration in my earliest years of teaching, I was fortunate to have had a mentor who was a skilled veteran in education. Because a mentor was one of the resources I had available as a novice teacher, I received the support I needed to achieve success and build my teacher capacity. At the large urban school district, I understood my purpose as a teacher because I had been provided authentic experiences guided by my mentor. Furthermore, my proximity to a large university allowed me to continue my former education. Since the district had streamlined the process, I benefited from an induction and mentoring program that assessed

my needs and provided resources for those needs. These resources included a mentor that routinely observed my classroom and then provided feedback for reflection and growth, which, in turn, improved my teaching efficacy.

Working in a rural school district has distinct differences, but students still need competent teachers to meet their needs. Factors such as a student's socioeconomic status (SES) play a particular role in the opportunities available to students. It was apparent the quality of teachers that were accessible to students was a significant factor in the constant turnover students were experiencing. I have observed a skilled teacher positively influences a student's commitment to the learning process. Teacher impact became especially evident after I moved into an administrative role.

As a new administrator, I noticed novice teachers quickly became frustrated with the lack of support. It was concerning to see teachers enter the profession with such enthusiasm, only to become withdrawn, move to a different campus, or leave the profession entirely. I witnessed novice teachers' difficulty with student discipline, necessary procedures, time management, and prioritizing and planning their schedules through formal observations and campus walkthroughs. They were constantly working on surface-level tasks and not building their content knowledge and pedagogy. A lack of support at our campuses and insufficient opportunities to draw quality teachers to the rural district resulted in teachers becoming dissatisfied with the campus requirements. Some left and became part of the growing attrition statistics.

Because my earlier positive experiences changed my teaching perspective, I knew the teachers at our campus needed support, but we did not have systems in place to encourage them to stay. Before 2020, The State of Texas education policy mandated that novice teachers participate in an induction program according to the Beginning Teacher and Induction Mentoring

program (TEA, 2020). TEA recently repealed that program and replaced it with the Mentor Program Allotment Rule (TEA, 2020). According to the new policy, districts are compensated for meeting the Texas Education Agency's guidelines for providing mentors to novice teachers (TEA, 2020). Although TEA has recently adjusted its mentoring policy, making it optional to participate in this much-needed program, the district where I am currently employed decided to implement an initiative to support teachers in years 0-3 of their teaching careers. This initiative provides a mentor to each novice teacher. These mentors are supported by a district induction coach and follow a structured system of guided interactions with their mentees. The district also added an instructional coach to each campus to augment the new induction and mentor program. This initiative is future-focused, with implementation in phases beginning with the 2020-2021 school year. The district's commitment to this program will offer ongoing support to meet all teachers' needs, most notably novice teachers.

I anticipated implementing a formal induction and mentor program could enhance novice teachers' pedagogy and content knowledge, similar to my early career experiences. This program could yield improved classroom outcomes and an increased sense of overall efficacy, including teaching efficacy, thereby encouraging these teachers to remain in the profession. My various career roles, including teacher and administrator, have informed a keen awareness of novice teachers' difficulties and challenges. My personal experiences and prior exploration of teachers' issues during years 0-3 impel my decision to pursue research about how an induction program shapes novice teachers' perceptions and development of pedagogical skills.

Situational Context

The mission of a rural, low-socioeconomic school district in East Texas is to provide students with the highest quality education through learning experiences focused on best

practices. However, the district faces a number of obstacles that impede its mission. During the 2020-2021 school year, the district's student population was 64% white, 25% Hispanic, 5% African American, and other ethnicities comprised less than 5% (TEA, 2019d). According to Title I guidelines, the district serves a student population with high poverty and increasingly minority represented (TEA, 2019d). The Texas Education Agency (TEA) reports more than 66% of the district's students are identified as economically disadvantaged, and more than 30% are minority (2019d). According to the data collected from the TEA (2014; 2019d), the Hispanic population has steadily increased by 3% per year over the last five years. Other subpopulations, including economically disadvantaged and English Language Learners have also grown (TEA, 2019d). The student mobility rate also added obstacles to improving student achievement (TEA, 2019d).

In addition to the challenges inherent to this district's student demographics, the district's staff turnover rate has remained over 20% per year for more than five years (TEA, 2019d). Moreover, the percentage of beginning educators, those with three or fewer years of experience, has exceeded the state average for more than five years (TEA, 2014; 2019d). District stakeholders recognize the necessity of hiring and retaining high-quality, highly qualified teachers who focus on effective instruction to increase student achievement, provide equitable educational opportunities, and close achievement gaps.

A review of district scores on the state-mandated achievement test (the State of Texas Assessment of Academic Readiness, or STAAR test) reveals no improvement in student achievement between the 2013-2014 and the 2018-2019 school years. Compared with the state's overall STAAR performance, the district has consistently ranked below the mean across all grade levels and subjects (TEA, 2014; 2019d). Even more concerning, the district has been

unsuccessful in closing the achievement gaps in most areas; in fact, the gaps have steadily increased in some cases, especially in English, reading, and mathematics (TEA, 2014; 2019d). Stagnant and declining student achievement results in increasingly wider gaps requiring the districts to develop a plan to retain highly qualified educators.

The percentage of novice teachers within the district significantly exceeds the state average. The combined rate of novice teachers with 1-5 years of experience is a staggering 49.8% of the total teaching staff (TEA, 2019d). Compared to the state average, the district is almost 15% above the state average of novice teachers (TEA, 2019d). The district is well above the state average for the number of employees that have been novice teachers for more than five years (TEA, 2014; 2019d). One considerable obstacle to recruiting high-quality teachers is the district's salary schedule. According to TEA (2019d), the district salary for teachers in years 1-5 is lower than the state average by as much as \$11,000. In aggregate, the issues of low student achievement, low salary, and the disproportionate percentage of novice teachers bring the district's needs into focus; supporting novice teacher growth is essential to yielding student achievement growth.

The Problem

Ideally, the district must ensure access to trained and highly qualified teachers to address student needs and increase student achievement. The district's current challenges are low-test scores, teacher turnover, and almost half of the teaching staff being novice teachers is cause for concern. If the problems go unaddressed, teacher quality and student achievement are apt to decline even further. The need to place qualified teachers in the classroom to make a practical impact, though paramount, was not a primary district focus until recently.

While the district launched an initiative that focuses on the learner experience and training teachers in current pedagogical practices, the program neglected to address the unique needs of novice teachers. With almost half of the district's teachers categorized as beginning teachers or teachers in years 1-5, intentional efforts must focus on building the capacity of novice teachers. Teacher capacity can be increased by focusing on teachers' intentional professional development through self-reflection and collaborating and fostering a positive climate with other educators on professional growth (O'Day, Goertz, & Floden, 1995). With many challenges novice teachers face, including raising student achievement scores, teachers must be provided ongoing and sustained professional development. Novice teachers should not be expected to enter the classroom ready to face all the challenges with little to no support. The primary concern is there have not been structured programs for new teachers at the campus or the district level to prepare and encourage new teachers.

Significance of Problem

In Willis ISD, a low socioeconomic school district in East Texas, novice teachers enter the classroom with challenges unique to their experience level but are often expected to have similar instruction, pedagogical strategies, and success as veteran teachers. To improve their success, novice teachers require formal preparation and training to support and improve their classroom effectiveness. One specific area that must be addressed is the new induction and mentoring program's effectiveness that provides structured support and suitable mentor teachers to be effective and valuable to novice teachers. A second concern is addressing novice teachers' needs in a hard-to-staff school. In addition, the lack of knowledge in current pedagogical practices and how the methods are communicated to teachers is a primary concern for the district. Furthermore, traditionally certified and alternatively certified teachers have different

needs due to their disparate training experiences. The differing needs can even be seen in the traditionally certified teacher's ability to identify in the educational role and those in the alternatively certified pathway have inserted themselves in the role quickly and are less likely to identify as an educator. Finally, the program is of interest to the district given the historically high teacher attrition rates.

The district has wrestled with the various factors that come from being an inexperienced teacher in a low socioeconomic school district and responded by implementing an induction and mentoring program. The needs of novice teachers must be addressed due to the "constant attrition of underprepared teachers (that) creates a harmful cycle in which students in poor schools are constantly learning from inexperienced and less effective teachers" (Darling-Hammond, 2007, p. 42). For teachers to remain in the education profession, districts must provide support such as an induction and mentoring program where novice teachers feel valued, can make an impact, and learn practical strategies that can be applied in their classroom (Darling-Hammond, 2003). Furthermore, districts will recruit and retain more qualified applicants if an induction program supports novice teachers in areas including student behavior, development of units and lessons, utilizing engaging strategies for students, and offering consistent support (Ingersoll & Strong, 2011; 2012). Novice teachers need to have sufficient training because without the training, "underprepared teachers tend to struggle in the classroom and exit the profession quickly" (Podolsky et al., 2017, p. 21). While novice teachers from traditionally certified and alternatively certified often fill vacant positions within the district, alternatively certified teachers' backgrounds differ in preparation and create a disparity in content knowledge, instructional ability, and teacher capacity. A review of existing literature revealed insufficient research on the perspectives of novice teachers from different certification programs.

Furthermore, the existing literature did not address novice educators' ability to improve teaching efficacy and impact novice teacher pedagogical skills with the varying support and program components. I became interested in and pursued this study to focus on the needs specific to the school district.

Research Questions

This study aimed to understand the effectiveness of an induction mentoring program on novice educators' teaching efficacy and impact on pedagogical skills based on varying levels of support and implementation of components. To evaluate the program and better understand how to support novice teachers through the induction and mentoring process, my purpose is to answer the following research questions:

1. Were there any statistically significant differences in the reported teaching efficacy based on demographic factors? Were there any statistically significant differences in the reported general teaching efficacy based on demographic factors? Were there any statistically significant differences in the reported personal teaching efficacy based on demographic factors?
2. Were there any statistically significant differences in the reported teaching efficacy (general or personal) attributed to the path of teacher certification?
3. Were there any elements of the induction and mentoring program that novice teachers believe impacted their pedagogical skills and teaching efficacy?

Important Terms

Traditional Certification/Standard Certification- "Traditional teaching certification can be obtained through a university undergraduate program, a university post-baccalaureate program,

or through certification earned in another state" (Uriegas, Kupczynski, & Mundy, 2014, p. 2).
(see Standard Certification)

Standard Certification- "Standard includes the standard, provisional, professional, and out-of-state certificates, all of which require the completion of an approved educator preparation program and passage of the appropriate certification examination" (Darling-Hammond et al., 2005, p. 9).

Alternative Certification- "Alternative certification has been a term used for a variety of programs that train and credential teachers in an expedited manner often by eliminating steps such as student teaching" (Uriegas, Kupczynski, & Mundy, 2014, p. 2). "Alternative includes the Texas Alternative Certification Program (ACP) and probationary certificates, which are issued to individuals who have a bachelor's degree, have passed subject matter tests, and are accepted into approved alternative certification programs in Texas. These alternative and probationary certificates are renewable for up to 3 years while the individual completes the requirements for a standard certificate" (Darling-Hammond et al., 2005, p. 9).

Induction Program -"Induction is a systemwide, coherent, comprehensive training and support process that continues for 2 or 3 years and then seamlessly becomes part of the lifelong professional development program of the district to keep new teachers teaching and improving toward increasing their effectiveness" (Wong, 2004, p. 42).

Mentor - "A mentor is a single person; whose basic function is to help a new teacher. Typically, the help is for survival, not for sustained professional learning, leading to becoming an effective teacher. Mentoring is not induction. A mentor is a component of the induction process" (Wong, 2004, p. 42).

Teaching efficacy- "Teacher's belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, p. 4)

Significant Stakeholders

The novice teachers in Willis ISD during the 2020-2021 school year who were willing to share their perceptions of the inaugural year of the induction and mentor teacher program were the primary sources of data for the stakeholders. Additionally, I have included the district induction and mentor coordinator information containing the mentors' observations. Novice teachers have shared how induction and mentor support has impacted their students' achievement. This study employs an action research design and consists of the novice teachers' input and varying perspectives through artifacts obtained as the stakeholders.

In addition to the novice teachers in Willis ISD, other stakeholders in the study included campus administrators, the assistant superintendent for curriculum and instruction, and curriculum personnel such as instructional coaches. The induction and mentoring program's development process began with the district's curriculum department, including the assistant superintendent of curriculum and instruction with input from instructional coaches and campus administrators. According to the agreed-upon induction program standards, novice teachers and mentor teachers were expected to fulfill the guidelines. The data gathered during the study came from the novice teachers' experiences in the classroom, which included their experiences with students and student performance. The data collected during this study provided the curriculum department insight into the induction and mentoring program and how they might adjust for each subsequent year. With this information, I trust the district was able to improve the program to improve novice teacher capacity and student performance in the classroom.

Closing Thoughts on Chapter 1

Novice teachers have needs unique to their experience level. Therefore, districts should create a plan that provides the needed resources and appropriately addresses educators in years 0-3 of the teaching profession. The development and implementation of an induction and mentoring programs for novice teachers must simultaneously address novice teacher deficiencies and build teacher capacity. Districts must clearly define the differing needs of novice teachers from various teaching preparation backgrounds and accurately address these needs. As with any successful program, appropriately outlining the goals and providing support over time that allows for professional learning to build novice teacher capacity is paramount. Finally, the process must allow for feedback solicited from the stakeholders to encourage continuous improvement.

In this action research study, I have examined novice educators' perceptions in Willis ISD during the inaugural year of the induction and mentoring program. Both the quantitative and qualitative data were gathered from the same group of novice teacher participants the district. The quantitative data was collected through the administration of the survey and the qualitative data was collected by asking semi-structured questions in focus group interviews. Additional qualitative data was collected from the district induction and mentor coordinator. In Chapter 2, I considered the various factors teachers in years 0-3 experience and problems that contribute to the need for ongoing support through induction and mentoring. In Chapter 3, I then discussed the methods and process of the action research study and solutions. Chapter 4 discusses the analysis of the data and the results, and in Chapter 5, I reflected on the study, offering a conclusion and final thoughts.

CHAPTER II

PROBLEM

Introduction

After novice teachers accept their first teaching position, it is common for them to face many classroom challenges. Novice teachers enter the education profession with a limited understanding of pedagogical knowledge, often expressly drawn from their beliefs and educational background, including their roles as students in the K-12 and college setting and any clinical teaching experiences (Lortie, 1975). Compared to successful veteran teachers, novice teachers' experience and knowledge levels are vastly different (Wong, 2004). Still, the criteria used for novice teacher evaluations are often the same as those who have been in the classroom refining their practice for many years (Wong, 2004). Wong and Wong (1991) have determined successful teachers demonstrate qualities such as effective classroom management, the belief in their students' success, and the creation of lessons that enhance student achievement and engagement. Therefore, school district leaders have realized instilling these qualities of effective teaching is integral to novice teachers' development; preparation is a necessary component of the instructional process that will develop successful classroom teachers and directly affect student achievement (Wong, 2004).

Districts have historically implemented induction and mentoring programs to offer support and guidance for novice teachers to bridge the gap and propel them forward through the first few years of teaching (Ingersoll & Strong, 2011; Wong, 2004). Without these supports and positive classroom experiences, novice teachers will often become disconnected, exasperated, or discouraged (Ingersoll, 2003; Smith & Ingersoll, 2004; Nevins Stanulis & Floden, 2009). This frustration contributes to teachers' growing attrition rate, wherein teachers move in and then out

of a district or exit the education profession and, is predominantly observed in teachers with 0-3 years of experience (Ingersoll, 2003; Smith & Ingersoll, 2004; Nevins Stanulis & Floden, 2009).

The research is well-defined, indicating induction and mentoring are valuable for the development of the novice teacher (Fletcher, Strong, & Villar, 2008; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011, 2012; Smith & Ingersoll, 2004; Kane, Rockoff, & Staiger, 2008; Ronfeldt & McQueen, 2017; Wong, 2004). However, the research is less detailed regarding the effects of induction and mentoring on teaching efficacy and the educators' belief they can directly impact student achievement despite other factors (Guskey & Passarro, 1994). For this reason, I have examined if the induction and mentoring program in Willis Independent School District affects the development of novice teachers' efficacy and pedagogical skills and, if so, how it relates to their beliefs about student achievement and learning and how it impacts their ultimate desire to stay in the district.

Chapter 2 highlighted the need for the novice teacher induction and mentoring program. Does the research support induction and mentoring through the lens of teaching efficacy? This chapter summarizes novice teachers in Texas and the growing demand for teachers in Texas public schools (TEA, 2019a; TEA, 2019c; NEA, 2020) and related state and district policies. I then examined the aspects of attrition and how induction and mentoring programs affect attrition rates, and the need for induction and mentoring programs. Additionally, I explored the research on teaching efficacy and its impacts on novice teachers. Finally, I discussed the components of a quality teacher induction and mentoring program.

Novice Teachers in Texas

Texas public schools educate the largest number of students and employ the most significant number of teachers in the United States (NEA, 2020). The student population in

Texas public schools has risen to over 5,000,000, and the number of teachers has surpassed 350,000, with 20,000 novice teachers entering the profession each year (TEA, 2019a; TEA, 2019c; NEA, 2020). On average, there are more than 15 students per teacher in Texas public schools, resulting in more than 300,000 students in novice educators' classrooms (NEA, 2020). However, Texas only recently recognized the value of supporting novice teachers through programs such as the Mentoring Allotment Program (TEA, 2020). With the number of students in novice teachers' classrooms exceeding 6% of the total student population (NEA, 2020), it is imperative districts delineate a program to support novice teachers through mentoring as well as a comprehensive induction program that has been evaluated for effectiveness and deemed to be both reliable and valid.

Policies Related to Induction and Mentoring

According to Carver & Feiman-Nemser (2009), when states create policies that require induction programs, novice teachers are more likely to receive support. As of 2019, over 31 states require districts to provide teacher induction programs; however, Texas has recently changed its policy (TEA, 2020). Unfortunately, Texas eliminated the required induction programs provided by districts and replaced them with a different and optional policy (TEA, 2020). The Texas Education Agency (TEA) no longer mandates districts provide novice teachers with an induction program, as the ruling surrounding the Beginning Teacher and Induction Mentoring program was repealed and replaced with the Mentor Program Allotment Rule (TEA, 2020). If districts choose to participate in this mentoring program, they must follow a list of guidelines specific to the mentoring program, and the guidelines must be implemented in their entirety to receive funding as dictated by House Bill 3 (TEA, 2020). The main problem with implementing a mentoring program is that the mentor teacher becomes responsible for providing

all novice teachers' support (Carver & Feiman-Nemser, 2009). As a district, the extreme drawback is that we are placing our mentor teachers as our "policy brokers" and are asking the mentor teachers to "determine to a great extent whether and how the aims of the policy will be realized" (Carver & Feiman-Nemser, 2009, p. 315). In this case, mentoring puts the responsibility of training the teachers on the mentor teacher instead of sharing ownership with the district (Carver & Feiman-Nemser, 2009). To ensure desirable outcomes, all districts should implement a comprehensive framework for an induction program and mentoring to support novice teachers (National Commission on Teaching and America's Future, 2016).

Novice Teacher Participation in Induction

The degree of participation in induction programs varies between states, in districts, and even on campuses; however, overall teacher participation in induction programs has increased across the nation (Ingersoll, 2012). The total number of novice teachers who were part of induction and mentoring programs from 1990 to 2008 rose from 50% to 91% (Ingersoll, 2012). The number of beginning teachers also rose from 68,000 to over 179,000 during these 18 years (Ingersoll, 2012). This significant increase in the number of participating teachers in induction may be due to 27 more states implementing induction program requirements in the 2010-11 school year (Ingersoll, 2012). When districts choose to participate, novice teachers in years 0-3 of their education profession gain additional job-embedded knowledge (Feiman-Nemser, 2001). Furthermore, districts consistently measure positive teacher quality gains when the induction and mentoring programs have more significant and challenging participation (Ingersoll & Strong, 2012).

Teacher Quality and Novice Teachers

Research has indicated that the classroom teacher is the number one factor impacting student achievement. Therefore, pushing for improved teacher quality during the first three years is crucial (Darling-Hammond, 2009; Feiman-Nemser, Schwill, Carver, & Yusko, 1999). The school district's focus is on increasing student achievement and ensuring the most competent and high-quality teachers are in each classroom (National Commission on Teaching and America's Future, 2016). According to the literature, teacher quality is the most significant factor that can impact student achievement (Darling-Hammond, 2009; Feiman-Nemser, Schwill, Carver, & Yusko, 1999). While schools need high-quality candidates, schools such as inner-city urban and rural schools face teacher shortages and often must hire novice teachers with little teaching experience in the classroom (Jacob, 2007). For this reason, the creation of programs and policies, such as induction and mentoring programs, encourages the development of high-quality teachers, promotes retention, and can be highly beneficial for teacher instruction and student performance in these schools (Kane, Rockoff, & Staiger, 2008).

Novice teachers tend to have less impact in the classroom than teachers who have more years of experience and training (Jacob, 2007). Overall, novice teachers will see tremendous success after years 3-5 and struggle more when lacking new teacher support (Kraft & Papay, 2014). The teachers who become dissatisfied with teaching because of a lack of support are likely to leave the district exit teaching (Podolsky, Kini, Bishop, & Darling-Hammond, 2017). However, those teachers who feel supported and prepared for their role as classroom teachers often see the effectiveness of their efforts through student outcomes and will remain in the education profession (Podolsky, Kini, Bishop, & Darling-Hammond, 2017).

School districts have developed induction and mentoring programs to provide necessary and previously lacking support to transform inexperienced recruits into high-quality teachers (Feiman-Nemser, 2001). Research has indicated a positive correlation between teacher quality and instruction directly linked to an effective induction program (Nevins Stanulis & Floden, 2009). Because teacher quality is the most significant factor affecting student achievement, the development of the induction and mentoring program should be given careful consideration as the components are assembled and executed (Darling-Hammond, 2009; Feiman-Nemser, Schwill, Carver, & Yusko, 1999). By planning a quality induction and mentoring program, school districts promote teacher growth in a shorter amount of time (Ingersoll & Strong, 2011). Overall, one of the tremendous benefits of quality induction and mentoring program is to develop the teacher that has the greatest positive effects on student performance and the promotion of teacher quality (Fletcher, Strong, & Villar, 2008; Ingersoll & Strong, 2012; Rockoff, 2008).

Although traditional and alternative certified teachers are both trained and hired as equals, they do not have an equal impact in the classroom during the first few years of teaching when evaluating teacher quality (Darling-Hammond et al., 2005). For teachers who have taken the alternative certification route, teacher quality is lower and likely harmful to student achievement (Darling-Hammond et al., 2005). In comparison, novice teachers from traditionally certified programs have been found to advance student achievement, with gains seen by as much as three months greater than in alternatively certified teachers' classrooms (Darling-Hammond et al., 2005).

Teacher Attrition and Turnover

Research has shown many benefits to implementing an induction program, including reducing the growing attrition and turnover in schools (Ingersoll & Merrill, 2012; Shaw & Newton, 2014). In the United States, there are over 3.3 million teachers, and more than 400,000 have three or fewer years of experience in education (National Center for Education Statistics, 2014). When viewing the statistics of the 400,000 teachers with three or fewer years of experience, the NCES (2014) reports that the number of teachers who choose to leave and the number who decide to change districts is more than 20%. This statistic is even higher in rural and urban schools with greater poverty levels (NCES, 2014). According to Ingersoll (2003), around 40%- 50% of novice educators with 0-5 years of experience have exited the education profession. Furthermore, Smith and Ingersoll (2004) compared novice teachers in the first year by elementary, middle, and high school campuses in varying schools by location such as rural, suburban, and urban. The study revealed that novice middle school educators who moved districts or left the profession was double that of the novice educators at the elementary level (Smith & Ingersoll, 2004). Novice teachers at the high school were 50% likely to change districts or exit the profession as novice teachers who worked at the elementary (Smith & Ingersoll, 2004). Conversely, research shows when induction supports are implemented in a district within the first year of teaching, it decreases the number of novice teachers who will move within the district or leave the district (Smith & Ingersoll, 2004; Ingersoll & Strong, 2012; Ronfeldt and McQueen, 2017).

A quality induction program reduces attrition and increases novice teachers' retention rates on campuses (DeAngelis, Wall, & Che, 2013). Without support such as an induction program, "underprepared teachers tend to struggle in the classroom and exit the profession

quickly" (Podolsky et al., p. 21). According to Wong (2004), "What keeps a good teacher are structured, sustained, intensive professional development programs that allow new teachers to observe others, to be observed by others, and to be part of networks or study groups" (p. 41). Various studies support the claim that retention increases with vital induction programs (Ingersoll & Strong, 2012). To emphasize this, Smith and Ingersoll (2004) found when the district increased support from the induction and mentoring program, they were more likely to increase their retention rate. In comparison, a study by Glazerman et al. (2010) found that the support provided by the induction and mentoring program could not be attributed to teacher retention. They also found induction was unrelated to student performance and teacher instruction (Glazerman et al., 2010). While this study contradicts much of the previous research on retention and the correlation to the induction and mentoring program, Ronfeldt and McQueen (2017) suggest some other mitigating factors and variables should have been considered in the study by Glazerman et al. (2010) and offered counterevidence that induction can be positively correlated to retention.

Cost of Attrition

School districts incur costs associated with teacher turnover and attrition through recruitment, training, and ongoing support of new hires (Breux & Wong, 2003). The price becomes much higher when considering novice teachers in the first years of teaching (Breux & Wong, 2003). A novice teacher's average total cost to a school district is around \$15,000 and could be as much as \$20,000 per year in urban areas (Podolsky et al., 2019). As a nation, public schools can incur turnover costs upwards of 8.5 billion annually (Carroll, 2007). According to Ingersoll and Strong (2011), "there is a growing consensus that high levels of teacher attrition, especially among beginners, are not cost-free. Teachers are an important resource; their

production, training, and recruitment entail costs" (p. 225). The cost of professional development, including induction and mentoring to meet novice teachers' needs, is often one of the most considerable costs incurred each year because novice teachers who must fill the open teaching positions require training and support (Carroll, 2007). As new teachers decide to change careers or move districts because of the stresses encountered at their current campuses, the district incurs the cost of a rising attrition rate (Smith & Ingersoll, 2004). While novice teachers have their associated costs, the cost incurred by school districts that refuse to provide support through induction and mentoring can increase by \$8,000 per novice teacher compared to districts that offer the needed support (Darling-Hammond & Baratz-Snowden, 2005).

High Poverty Schools and Attrition

Low-performing, high-poverty schools often find higher teacher turnover (Borman & Dowling, 2008). In schools with significant numbers of low-socioeconomic student populations, the attrition rate is upwards of 10% compared to more affluent schools, which average around 6% (Podolsky et al., 2019). The ability to attract and retain high-quality teachers is a struggle in schools with a larger population of high-poverty students (Ingersoll, 2001; Knoblauch & Hoy, 2008; Nevins Stanulis & Floden, 2009). However, for those schools that offer induction and mentoring programs, the turnover is lower than at schools without such programs. (Borman & Dowling, 2008). Understanding the support needed to retain the best teachers for the students in the greatest need of improved student achievement is of paramount importance (Ronfeldt & McQueen, 2017).

Schools find recruiting and retaining teachers difficult and are often desperate to fill teaching positions because of high attrition rates (Childre, 2014; Ng & Thomas, 2007; Podolsky, Kini, Bishop, & Darling-Hammond, 2019). Recruiting experienced teachers is problematic in

hard to-staff-schools, so teachers hired are frequently sourced from alternative certification programs and are often less experienced than those in more affluent schools (Jacob, 2007; Childre, 2014; Ng & Thomas, 2007). The campuses in greatest need of filling these positions seek out teachers from alternative certification programs regularly because they cannot attract highly qualified teachers or those from traditional certification programs (Jacobs, 2007). The need to fill positions at high-poverty schools is critical, and novice teachers entering the profession often lack the preparation needed to be effective in the classrooms where this experience is required the most (Childre, 2014; Ng & Thomas, 2007).

Instructional Strategies and Novice Teachers

Novice teachers who are part of a structured induction program will discover and demonstrate more effective teaching techniques with fidelity than those who did not participate (Kraft & Papay, 2014). As stated by Kraft & Papay (2014), "School environments where teachers collaborate frequently, receive meaningful feedback about their instructional practices, and are recognized for their efforts will promote teacher improvement at faster rates than schools where such practices are absent" (p. 478). In education, the first years of teaching are when the most significant gains in teacher growth and quality are likely to be made (Rivkin, Hanushek, & Kain, 2005). To assist in the process, induction and mentoring programs promote novice teacher learning in a shorter time frame to maximize the amount of knowledge gained and applied in the classroom (Ingersoll & Strong, 2012). Above all, the level and quality of instruction novice teachers receive will contribute to the success of the teachers, the program, and the students (Smith & Ingersoll, 2004). This becomes extremely important in urban schools where teaching strategies implemented are often referred to as the "pedagogy of poverty" because of the precedence set by those who have been in the school the longest or because novice teachers in

urban schools do not have the necessary strategies to be successful in the school (Haberman, 2010).

Student Achievement and Novice Teachers

Increasing student achievement has been identified as one of education's primary goals through induction and mentoring (Ingersoll & Strong, 2012). Research shows that novice teachers involved in the induction program and implementing the strategies in their classroom are more likely to see positive gains in student achievement than those who did not (Ingersoll & Strong, 2012). One specific study examined by Ingersoll & Strong (2012) and conducted by Mathematica Policy Research involved 1,009 teachers from different low-income, urban schools. The participating educators were grouped into control and test groups (Ingersoll & Strong, 2012). In the test group, novice teachers received various supports such as specific guidance materials, scheduled meetings with mentor teachers, monthly training, appointments to watch a veteran teacher, and detailed walkthroughs specific to the induction and mentoring program (Ingersoll & Strong, 2012). The control group participated in the district's traditional induction program provided to novice teachers and did not receive any part of the new induction program design (Ingersoll & Strong, 2012). After the second year, researchers noted substantial differences in student growth between the two groups, with the test group's student scores well above the control group (Ingersoll & Strong, 2012, p. 224). Glazer et al. (2010) found novice teacher induction programs can positively impact student performance after two years of a program being successfully implemented.

Teaching Efficacy

Teaching efficacy is firmly rooted in self-efficacy theory and linked to Bandura's social cognitive theory (Bandura, 1977; Bandura, 1997). Bandura (1997) stated, "self-efficacy, what

people think, believe and feel affects how they behave" (Bandura, 1986, p. 25). In other words, self-efficacy plays a significant role in someone accomplishing a task because they believe in themselves (Bandura, 1997). Similarly, teaching efficacy plays a significant role in student achievement (Guskey & Passaro, 1994). As maintained by Guskey & Passaro (1994), teaching efficacy is the "teacher's belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (p. 4). Teaching efficacy plays a significant role in teachers' belief in their abilities and is solidified within the first few years as an educator (Linek et al., 2012). Teaching efficacy influences the amount of time and energy an educator will devote to their role as a teacher and is based on the teachers' beliefs they can make a difference in student achievement (Bandura, 1997; Gibson & Dembo, 1984).

The Teacher Efficacy Scale was created by Gibson and Dembo (1984) to measure teaching efficacy. Gibson and Dembo (1984) determined through their research there were two categories to determine an educator's teaching efficacy. The two categories included: personal teaching efficacy and general teaching efficacy (Gibson & Dembo, 1984). Personal teaching efficacy is determined by the educator's belief in their teaching abilities, their competency level, and content knowledge (Gibson & Dembo, 1984). General teaching efficacy is the educator's belief in influencing student learning despite environmental factors affecting students (Gibson & Dembo, 1984). In measuring teaching efficacy in both categories, research has shown that educators teaching efficacy, and student academic performance strongly correlate (Gibson & Dembo, 1984; Ross, 1994). (See Appendix I)

High Teaching Efficacy

Overall, high teaching efficacy can result in specific behaviors positively impacting the classroom (Gibson & Dembo, 1984). A student's motivation level is also affected by teaching

efficacy (Midgley, Feldlaufer, & Eccles, 1989), teachers' willingness to try new ideas (Allinder, 1994), and the teachers desire and belief they can affect the student performance in all students (Gibson & Dembo, 1984). Teachers found to have high efficacy are more likely to use innovative instructional methods (Allinder, 1994) and are not apt to give students negative feedback (Gibson & Dembo, 1984). Educators' overall attitude and outlook with high teaching efficacy positively impacts teaching and students (Allinder, 1994).

In a review of 88 studies regarding teaching efficacy, Ross (1994) discovered educators with high efficacy used more involved instructional strategies and needed time commitment and effort. Teachers with high efficacy are also directly correlated with above-average district evaluations (Ross, 1994). Through his review of the 88 studies, Ross (1994) identified a correlation between high teaching efficacy, increased educator capacity, and better instructional practices. Ross (1994) found high teaching efficacy was related to a novice teacher being more successful with classroom management and implementing effective instructional strategies. In addition, high teaching efficacy was associated with effective classroom management, addressing the needs of low performing students, improving the attitudes of students, and improving the teacher's mindset attributed to increased student performance (1994).

In one specific study conducted by Podell & Soodak (1993), the researchers examined the relationships between the factors of teaching efficacy, referral to special education, and student socioeconomic status (SES). Podell & Soodak (1993) discovered teachers with a high teaching efficacy were less likely to evaluate students based on SES status and accepted students' placements. Contradictory to this, teachers with low teaching efficacy would often question whether low SES students and mainstreamed students were in the most accurate placements (Podell & Soodak, 1993). Furthermore, the educators with low teaching efficacy were apt to

recommend students with low SES status be tested for a learning disability (Podell & Soodak, 1993). This study's findings support the findings of Soodak, Podell, and Lehman (1998), wherein teachers with high efficacy accepted student placements regardless of student behavior or learning disabilities.

Measuring Teaching Efficacy

Teaching efficacy, sometimes referred to as an educator's sense of efficacy, was identified as a critical construct in education and has been directly tied to student success and teacher effectiveness since the concept was first introduced over 40 years ago (Gibson & Dembo, 1984). Gibson and Dembo (1984) focused their study on creating an instrument that measures teaching efficacy. In doing so, they tied together two significant studies on efficacy. In one study, Gibson and Dembo (1984) centered their research on Albert Bandura's self-efficacy theory (1977). In addition to the self-efficacy theory from Bandura (1977), Gibson and Dembo (1984) also utilized a two-item measure from Rotter's (1966) locus of control conducted by Berman and McLaughlin (1977) as well as Armour et al. (1976). To combine the studies and measure teaching efficacy, Gibson and Dembo (1984) separated the research into two categories to examine "outcome expectancy," renamed in the study to "general teaching efficacy," and "self-efficacy," renamed to "personal teaching efficacy" (p. 570). According to Gibson and Dembo (1984), "If we apply Bandura's theory to the construct of teaching efficacy, outcome expectancy would essentially reflect the degree to which teachers believed the environment could be controlled, that is the extent to which students can be taught given such factors as family background, IQ, and school conditions" (p. 570). An example from the survey of general teaching efficacy would be, "A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement" (Gibson & Dembo,

1984, p. 573). Personal teaching efficacy would evaluate self-efficacy through the lens of teaching efficacy and identify teachers' personal beliefs and how capable they feel in the classroom and their influence on student learning given their knowledge and skill level (Gibson & Dembo, 1984). An example of personal teaching efficacy from the TES includes, "When I really try, I can get through to most difficult student" (Gibson & Dembo, 1984, p. 573). Teachers who scored high in both dimensions were more likely to demonstrate persistence, time spent on planned instructional activities, balance group work with whole group instruction, and consistently provide positive feedback to students (Gibson & Dembo, 1984). In the Teacher Efficacy Scale, Gibson and Dembo (1984) also examined "verbal ability" and "flexibility" as two additional elements of teaching identified in previous studies as a characteristic of effective teachers and felt it necessary to isolate them to understand teaching efficacy better (p. 570).

The study by Gibson and Dembo (1984) has contributed to the educational field by creating a tool to measure teaching efficacy and other studies that followed modified versions of Gibson and Dembo's Teacher Efficacy Scale (Podell & Soodak, 1993; Tschannen-Moran et al., 1998; Woolfolk, Rosoff, & Hoy, 1990). While research from Gibson and Dembo (1984) brought significant contributions to understanding teaching efficacy, some studies scrutinize the instrument and the meaning behind personal teaching efficacy and general teaching efficacy (Woolfolk & Hoy, 1990). In its original form, the Teacher Efficacy Scale was edited in length from 30 questions to 16 questions after Gibson and Dembo (1984) found that several factors did not yield consistent data. Following Gibson and Dembo (1984), various alterations to the Teacher Efficacy Scale were made to the text and the number of items in the survey (Guskey & Passaro, 1994; Woolfolk & Hoy, 1990). While there are opposing views on the usefulness of the Teacher Efficacy Scale, Tschannen-Moran et al. (1998) did not discourage the use of the Teacher

Efficacy Scale based on the two categories; instead, they encourage researchers to breakdown the data from their studies because each set of factors might yield different results than previous studies. Interestingly, an ongoing debate has yet to be resolved on how personal teaching efficacy and general teaching efficacy are interpreted and how the two factors are related to Bandura's self-efficacy theory (Woolfolk & Hoy, 1990). Some assert there should be two factors to teaching efficacy, as Gibson and Dembo (1984) suggest, but other researchers view teaching efficacy holistically (Woolfolk & Hoy, 1990).

Teaching Efficacy and Novice Teachers

For teachers to succeed and grow, teaching efficacy must focus on education today (Hoy & Spero, 2005). Novice teachers must have the opportunity to realize success in their roles as teachers and have positive experiences (Hoy & Spero, 2005). As noted by Hoy & Spero (2005), "Novice teachers completing their first year of teaching who had a high sense of teaching efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced fewer stress" (p. 346). If novice teachers have classroom experiences where they feel successful and have mastered the skill, they are more likely to have high teaching efficacy (Goddard et al., 2000). The need for novice teachers to have mastery experiences is essential in the years 0-3 of teaching to develop sustained feelings of high teaching efficacy (Goddard et al., 2000). Affording novice teachers opportunities to understand and experience success in the teaching profession can lead to an overall sense of positive efficacy towards teaching and, thereby, affect the retention of novice teachers (Gareis & Grant, 2014). One way to provide novice teachers with this successful teaching experience and thus foster higher levels of teaching efficacy is through their participation in induction programs.

Quality New Teacher Induction Program Design

While induction and mentoring are often linked together, they have distinct differences in meaning. By definition, "Induction is a systemwide, coherent, comprehensive training and support process that continues for two or three years and then seamlessly becomes part of the lifelong professional development program of the district to keep new teachers teaching and improving toward increasing their effectiveness" (Wong, 2004, p. 42). In comparison, mentoring is a relationship between an experienced teacher trained to serve as an advisor, who offers support, supervision, and assistance to a novice educator (Barrera, Braley, & Slate, 2010). While induction and mentoring are often used interchangeably, mentoring is one of the many elements that comprise the induction program (Wong, 2004, p. 42). Induction then becomes the program designed to support and train novice teachers, and mentoring is the component of induction with the greatest impact on the success of the novice teacher (Wong, 2004; Ingersoll & Strong, 2011).

According to the National Commission on Teaching and America's Future (2016), all states should create a framework to develop novice teachers' pedagogy through induction while providing support from a mentor teacher. The induction process has a support system of collaborative staff members, including mentor teachers and principals working together to support novice teachers' needs (Sowell, 2017). "Teachers who have strong preparation experiences are more likely to feel effective in the classroom, which is associated with improved student outcomes, and to remain in the profession over time" (Podolsky et al., 2017, p. 21). Novice teachers who are offered little training and support often find themselves not feeling connected to the profession, unqualified, and struggling to the point they leave the education profession (Podolsky et al., 2017). School districts must take caution as they implement the induction and mentoring program to not only be used to teach survival skill sets in classroom

management but also to teach proactive pedagogical strategies as well (National Commission on Teaching and America's Future, 2016; Wong, 2004). By implementing an effective program, novice teachers will likely feel more successful and positively impact the teaching profession (Ingersoll & Strong, 2011).

For induction to be effective, different elements must be utilized in the design, considering the varying needs of novice teachers and factors specific to each district (Desimone et al., 2002). The facilitator will play an essential role in the induction program's execution and should be selected with consideration (Desimone et al., 2002). The program's design must be relevant to the novice teacher and have components that can be utilized through technology and hands-on learning (Desimone et al., 2002). Careful consideration should be given to the type of activities planned for induction and should include tasks that allow for collaborative and meaningful work relevant to their role at the school (Desimone et al., 2002). As each component is designed, it is essential to remember induction is not a task to be completed alone (DuFour, 2011). Instead, it is like a learning community and should be a collaborative effort focusing on building novice teacher knowledge and skills (DuFour, 2011). Other components that should be considered when designing the program include coaching, the level and duration of coaching, the number of classroom visits, and the veteran or mentor teachers involved (Youngs, 2007). There also needs to be set times for novice teachers and veteran teachers to collaborate and build capacity together (Darling-Hammond et al., 2005). The elements of an induction program have shown positive results and should be considered carefully as they will add value to the novice teacher's experience (Desimone et al., 2002). Suppose professional development for novice teachers is not planned, and meetings become infrequent or not scheduled; in this case, it is

unlikely the program will lead to the overall positive benefits an induction program has to offer (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009).

The induction and mentoring program elements may differ significantly from other induction and mentoring programs. One induction and mentoring period may only last a few days, while other schools continue to support over several years with various milestones (Smith & Ingersoll, 2004). The induction process could include participants with no experience in education or educators who have recently joined the district (Smith & Ingersoll, 2004). As previously discussed, collaboration is a critical element of induction and workshops and seminars, but not all districts can offer extended training due to high relative costs, limited time, or the emphasis placed on the program (Smith & Ingersoll, 2004). Additionally, there are many different ways a mentor can collect information from their mentee (Gareis & Grant, 2014). Collection methods may include dialogue, journaling, observations, teacher lesson plans and class activities, and reviewing student data or work (Gareis & Grant, 2014). With many differences in induction programs from district to district, it is not surprising there is significant variance in teacher capacity development.

When developing the framework, induction and mentoring program developers should carefully consider time, subject matter, and skill focus (Darling-Hammond & Richardson, 2009). With the induction and mentor program, novice teachers' training should be a minimum of 6-12 months and should include 30-100 hours of working towards specific goals (Darling-Hammond & Richardson, 2009). Other components for successful professional development, suggested by Darling-Hammond and Richardson (2009), include opportunities for teachers to be engaged with hands-on experiences, opportunities to evaluate the student continually and the teacher's performance, and opportunities and time to review other teachers in practice as well as

opportunities for constructive feedback. Additionally, schools must provide conditions where novice teachers feel comfortable sharing ideas and collaborating with their mentors to build their teacher capacity (Ingersoll & Strong, 2011).

In reviewing the literature, two specific induction models promote novice teachers' learning experience and build teacher capacity (Cuddapah & Clayton, 2011; Martin & Mulvihill, 2017). One model is based on a program similar to medical field students' clinical rotations (Martin & Mulvihill, 2017). In the program, novice and preservice teachers gain experience through a year-long residency model working with a veteran mentor teacher (Martin & Mulvihill, 2017). Another model for induction creates a beginning teacher cohort (Cuddapah & Clayton, 2011). The beginning teacher cohort supports all novice teachers but is specifically designed for alternatively certified teachers (Cuddapah & Clayton, 2011). "Made up of all novice participants... the community is altered, creating a forum that encourages novices to reveal vulnerabilities, critiques, questions, and successes as they make meaning of their practice and their emerging professional identities" (Cuddapah & Clayton, 2011, p.73). District leaders can manipulate both the clinical model and beginning teacher cohort to fit the district's budget, scheduling, and time constraints.

Different supports within an induction program structure will maximize the number of successful teachers and affect student achievement (Smith & Ingersoll, 2004; Ronfeldt & McQueen, 2017). If support is removed, novice teachers will find it overwhelming to be first-year teachers (Kraft & Papay, 2014). Ronfeldt and McQueen (2017) identified different supports that novice teachers felt were necessary to succeed in the induction program. Two items novice teachers listed as essential were the use of mentors within a robust mentor program and supportive and involved school administration (Ronfeldt & McQueen, 2017). When novice

teachers and mentors teach in the same content area as the mentor teacher and have opportunities to collaborate, novice teachers reported feeling more supported than in different instruction areas (Smith & Ingersoll, 2004). In one study, more support for novice teachers was added to the induction program, and new teachers felt more successful and were more likely to remain at the campus for years 2-5 of their teaching careers (Ronfeldt & McQueen, 2017).

Research reveals several positive effects of a successful induction and mentoring program on novice educators and their performance. Ingersoll & Strong (2011) found the implementation of the program produced encouraging results in the classroom, including "keeping students on task, developing workable lesson plans, using effective student questioning practices, adjusting classroom activities to meet students' interest, maintaining a positive classroom atmosphere, and demonstrating successful classroom management" (p. 225). Once teachers have spent a substantial amount of time in an induction and mentor program, research is positive concerning students' experience and shows increased confidence, the ability to identify professionally with the teaching profession, and higher retention (Ingersoll & Strong, 2011). While not all studies reported similar results, a majority of literature indicates that induction promotes teachers' retention (Smith & Ingersoll, 2004). An inspiring benefit to the induction and mentoring program is the collaboration and positive relationships fostered between the mentor and mentee (Gareis & Grant, 2014). An even more robust indicator of the program's effectiveness is when educators experience positive gains in their teaching efficacy and student achievement (Ingersoll & Strong, 2011).

A central factor affecting an induction program's overall health and school organization is campus leadership (Ingersoll & Strong, 2012). Carver & Feiman-Nemser (2009) stated, "Poor leadership at the top, isolating professional cultures and demoralized staff all work to mediate

and/or block thoughtful induction and mentoring” (p. 324). Influences filtering from campus administration can impact the induction program's effectiveness (Ingersoll & Strong, 2012). Campus admin set the tone for communication, meeting norms, and planning time (Ingersoll & Strong, 2012). Johnson and Kardos (2002) found that setting times for meeting with campus administration and creating check-in times for novice and mentor teachers to update progress are necessary for the novice teacher to feel success. Johnson and Kardos (2002) further noted collaboration with all campus stakeholders is essential to increase the induction program's benefit.

Quality Mentoring

The most essential element of the induction program that can enhance novice educators' development is creating and maintaining an effective mentoring program (Ingersoll & Strong, 2012). The mentor teacher must be foundationally strong in his or her knowledge and skills and have several years of experience before being prepared to provide support to a novice teacher (Darling-Hammond et al., 2005). Mentors also need the training to maximize their effects in their role as instructional coaches (Sowell, 2017). With additional training, they will likely gain confidence in their mentoring role (Sowell, 2017).

An immediate and crucial decision in the mentoring program is selecting mentor teachers who will build a relationship with the novice teacher (Johnson & Kardos, 2002; Ingersoll & Smith, 2011). To produce the most significant gains for the novice teacher in the classroom, research shows mentors and novice teachers must be allowed to have input in the selection process to identify with whom they would like to work (Wong, 2004). To improve the mentoring benefits, it is crucial to consider matching a mentor with a novice teacher in the same content area and grade level because of their specific knowledge and skillset (Smith & Ingersoll,

2011). One study found the likelihood of the novice teacher leaving is reduced by thirty percent if they are matched with a mentor teacher within the same subject or grade level (Smith & Ingersoll, 2004).

Designing a quality mentoring program goes beyond selecting the mentor to include other components. Factors such as involving leaders of the school and community as well as administrators, consistency with the implementation of mentoring, the development of mentor schedules, and creating a reflective process on the mentoring program to evaluate the program's effectiveness should all be examined (Smith & Ingersoll, 2011; Villani, 2009). The amount of time mentors will need to devote to the program must be outlined, as districts can opt for part-time or full-time mentors and include a stipend to supplement the additional time the mentor must devote (Villani, 2009). Whether mentor or mentees, the individuals involved in the program must receive the full support of the district and campus administration and should be given opportunities to collaborate with additional time for planning or even an extra planning period (Villani, 2009). Ideally, the campus schedule design will include common planning time for novice teachers and their mentors (Smith & Ingersoll, 2011). While mentoring may only be one component of the induction process, it is the one component that has the greatest impact and should be carefully considered, as it will directly affect the overall results of the induction program (Ingersoll & Strong, 2012).

Conclusion

The literature review shows that induction and mentoring are integral to building capacity within the novice teacher. Significant research demonstrates the success of novice teachers is affected by several factors which include employment in schools with low socioeconomic and high minority populations (Browman & Dowling, 2008; Childre, 2014; Ingersoll, 2001;

Knoblauch & Hoy, 2008; Ng & Thomas, 2007; Nevins Stanulis & Floden, 2009; Poldolsky et al., 2019), traditional versus alternative certification (Childre, 2014; Ng & Thomas, 2007), the ability to employ effective classroom management (Flower, McKenna, & Haring, 2017), teacher quality (Darling-Hammond et al., 2005; Darling-Hammond, 2009; Feiman-Nemser et al., 1999; Kraft & Papay, 2014), educators' teaching efficacy (Bandura, 1997; Gareis & Grant, 2014; Kraft & Papay, 2014; Linek et al., 2012), participation in induction and mentoring programs (Ingersoll, 2012; Feiman-Nemser, 2001), and the design of induction and mentoring programs (National Commission on Teaching and America's Future, 2016; Podolsky et al., 2017; Sowell, 2017; Wong, 2004).

One of the more significant contributions that affect the development of novice teacher perceptions is a novice educator's teaching efficacy formed by the educators' belief they can transform student performance (Bandura, 1997; Gibson & Dembo, 1984; Guskey & Passarro, 1994; Linek et al., 2012; Ross, 1994). All of these factors have an impact on a novice teacher's success, thereby potentially affecting the overall organization through teacher attrition, retention, and cost (Carroll, 2007; Ingersoll & Merrill, 2012; Ingersoll & Smith, 2003; Podolsky et al., 2019; Ronfeldt & McQueen, 2017; Shaw & Newton, 2014; Smith & Ingersoll, 2004). Teachers' successful implementation of strategies and development of teaching efficacy through induction can directly impact student achievement (Glazerman et al., 2010; Goddard et al., 2000; Ingersoll & Strong, 2012). An essential component of supporting novice teachers is establishing an induction program to provide mentorship (Ingersoll & Strong, 2011; National Commission on Teaching and America's Future, 2016; Podolsky et al., 2017; Sowell, 2017; Wong, 2004). Mentors can offer support, collaborative opportunities, and constructive and meaningful feedback to build teaching capacity (Darling-Hammond & Richardson, 2009; Ingersoll & Strong,

2011). Understanding the underlying factors affecting novice teachers' perceptions is necessary for creating an effective mentor and induction program addressing teachers' needs and helping the novice teacher realize success.

Creating an effective induction and mentoring program is critical to supporting novice teachers. While different variations of induction and mentor programs exist between districts, research indicates that understanding the various factors related to teacher preparation can dramatically affect teacher quality and factors related to teaching efficacy. Furthermore, understanding what it takes for novice teachers to feel prepared and believe in themselves as teachers is crucial to the induction and mentoring program's components.

For this study, the questions to be answered are: how does an induction and mentoring program change novice teachers' perceptions and affect teaching efficacy throughout participation in the induction and mentor program; and how does the program develop the novice teachers' effectiveness in the classroom based on teacher and student needs? Through this study, I hope to provide novice teachers' perspectives on the effectiveness of induction and mentoring programs and how they affect their efficacy.

CHAPTER III

METHODOLOGY AND METHODS

Proposed Solution

My proposed solution was derived from the collection and analysis of qualitative and quantitative data to identify factors affecting novice teachers to improve the current induction and mentoring program for all novice educators in the district. The 2020-2021 school year served as the inaugural year for the district's induction and mentoring program. This program focused on building teacher capacity with the help of mentor teachers and additional resources through ongoing professional development. Novice teachers, defined as having three or fewer years in education (National Center for Education Statistics, 2014), need more support and require more professional development than experienced teachers due to the lack of pedagogical and content knowledge (Fletcher, Strong, & Villar, 2008; Ingersoll & Smith, 2004; Ingersoll & Strong, 2011, 2012; Smith & Ingersoll, 2004; Kane, Rockoff, & Staiger, 2008; Ronfeldt & McQueen, 2017; Wong, 2004). Also, many novice teachers exhibit gaps in their ability to apply knowledge from theory to practice in the classroom (Haynes et al., 2014; Wong, 2004). The information I obtained from this study is crucial because it provides insight into the educator's perceptions of teaching efficacy and the induction and mentoring program elements that impact pedagogical skills related to the teaching profession. This knowledge was needed to identify factors affecting novice teachers and accurately address the needs of novice teachers. With this insight, I sought to identify strengths and weaknesses with the goal of improving this program.

Outline of the Proposed Solution

The district implemented an induction/mentoring program in response to the need for support for novice teachers in the first few years of their educational careers. I evaluated the

action and intervention plan to determine if the program produces the desired effects in novice teacher perceptions and knowledge, instructional, and classroom management skills to improve teaching efficacy and pedagogical skills in the classroom. As referenced in Chapter 2, the literature states there is a strong correlation between teaching efficacy, educator's behaviors, and the goal of education- increased student academic performance (Gibson & Dembo, 1984; Ross, 1994). The survey data from novice teachers, the findings from semi-structured interview questions administered to focus groups, and the data shared by the district induction and mentor coordinator were collected and analyzed to determine the program's effectiveness and strengths and any weaknesses to offer suggestions for program improvement in the 2021-2022 school year.

The Teacher Efficacy Scale (Woolfolk & Hoy, 1990) was administered to study the teacher induction and mentoring program's effects on teaching efficacy (Woolfolk & Hoy, 1990). The Teacher Efficacy Scale was based on the research from Gibson and Dembo (1984) followed by the research of Woolfolk and Hoy (1990). The 30 questions in the original Teacher Efficacy Scale (Gibson & Dembo, 1984) include measuring personal teaching and general teaching efficacy shortened to 10 items in the short form (Woolfolk & Hoy, 1990). Personal teaching efficacy is linked to the educator's belief that they have the skills necessary to succeed in the classroom and impact student learning (Gibson & Dembo, 1984). General teaching efficacy is the teacher's belief in influencing student learning despite the environmental factors affecting students (Gibson & Dembo, 1984). The Teacher Efficacy Scale instrument requires teachers to respond based on their beliefs to statements indicating how the teacher can affect different scenarios based on a continuum scale of 1, which denotes "strongly agree" to 6, indicating "strongly disagree" (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990). In the survey from Woolfolk and Hoy (1990), the two independent factors rated are personal teaching efficacy

(PTE) and general teaching efficacy (GTE). (See Appendix I) The personal teaching efficacy survey items must be reversed scored (Woolfolk & Hoy, 1990). For example, on the personal teaching efficacy item, “If I try really hard, I can get through to even the most difficult or unmotivated students,” the item must be reversed so the scoring of 6, which is “strongly disagree,” should receive a rating of 1 instead of 6 (Woolfolk & Hoy, 1990).

For this study, I administered the short-form survey from Woolfolk & Hoy (1990) to novice teachers at the end of the 2020-2021 school year. The purpose for administering the short form from Woolfolk and Hoy (1990) instead of the original long-form survey created by Gibson and Dembo (1984) was because there were problems with the items loading in the results. Woolfolk and Hoy (1990) found some of the items on the long survey would display results on both general teaching efficacy and personal teaching efficacy or would not load on either and instead shortened the survey to those that load only in one area.

In addition, I collected the novice teachers' demographic information. The reason for administering the survey at the end of the year and not at the beginning is due to the Coronavirus and the beginning of school starting remotely for the first month. However, most students have since returned to campus for face-to-face instruction, and the district does have less than 10% of the students remaining remote for their instruction. The inability to provide a pretest will be considered a limitation of the study because I will not be able to administer the survey and conduct interviews with semi-structured questions administered to focus groups at the beginning of the year to help establish a connection as a researcher with the novice teacher participants. Ideally, I would have administered the survey prior to participation and following would have analyzed those results looking for differences and attempted to determine if participation in this

program led to an increased sense of teaching efficacy overall; on the subscale of general teaching efficacy and or on the subscale of personal teaching efficacy.

I obtained antidotal data from the district induction and mentor coordinator, including a various surveys, questionnaire, and observation data to gain insight into teaching efficacy throughout the 2020-21 school year and the elements of the induction and mentoring program novice teachers believed impacted their pedagogical skills. The district induction and mentor coordinator completed at least one observation per 9-weeks or four times per year, and the mentor teacher conducted observations using the form at least once per month. Each time an observation was done, the district induction and mentor coordinator and mentor teachers conferenced with the novice teacher to provide coaching and additional feedback. I used the antidotal data provided by the district induction and mentor coordinator to provide an additional data source that gave insight into the novice teacher's efficacy and pedagogical skills throughout the 2020-21 school year. Some questions asked by the district mentor coordinator throughout the year to gather antidotal data included, "What has been the best part of teaching so far?", "What is one goal you have for next semester?", and "As a beginning teacher, what do you need most to be successful?". Using additional data sources to help with the triangulation of data, I wanted to provide multiple data sources to strengthen the validity of the data (Creswell, 2014).

After the survey results, demographic information, and other data were collected, I analyzed the data to create semi-structured interview questions to better understand the novice teachers' beliefs. Five focus groups of novice educators within the same campus group were asked to participate in a focus group. The focus groups were formed based on the grade levels taught at each campus. Group 1 was the elementary school which included Pre-K through 1st grade, group 2 was the intermediate campus which provided for 2nd through 4th grade, group 3

included 5th and 6th grade, group 4 was 7th and 8th grade at the junior high campus, and group 5 was the high school which includes grades 9th through 12th. A strategy I employed to ensure validity in the interview process was member checking (Creswell, 2014). Once the data was collected, the data results were returned to the novice teacher participants to check for accuracy, and so the data conveyed an accurate recount of their experiences (Creswell, 2014).

The information from each semi-structured interview question was broken down line by line separately and analyzed for emergent themes (Creswell, 2012). As categories emerged, I then used the constant comparative method of data analysis to compare the interviews' results to improve, add to, or delete the selected categories as needed. (Creswell, 2012). I also coded the district induction and mentor coordinator data and sorted the information into categories. To better sort the information from the emergent themes determined from the constant comparative method of data analysis, I used a concept map to help organize data (Creswell, 2014). By coding the data in the described manner, I wanted to be more consistent with the novice teachers' results. Once the data was sorted into categories, I again used member checking to review and compare the original interviews to ensure I stayed consistent with the novice teacher participants' viewpoints (Creswell, 2014).

With the study results, I wanted to provide a thorough discussion of novice teacher participants' viewpoints and perspectives and reveal insight into the varying factors affecting novice teaching efficacy, pedagogical skills, and overall success in the classroom. I then presented the key findings from the data results to the district mentor coordinator and assistant superintendent of curriculum and instruction. After the key findings were reviewed, I discussed the implications of the results and suggestions for the 2021-2022 school year induction and mentoring program.

Justification of Proposed Solution

My study's rationale comes from the need to understand the impact, strengths, and weaknesses of teacher induction and mentoring program in its inaugural year on novice teaching efficacy and the development and application of their pedagogical skills. Feiman-Nemser (2001) posits when districts choose to participate in and implement induction and mentoring program, novice teachers in years 0-3 of their education profession will gain additional job-embedded knowledge. Research shows that the novice teachers supported through an induction and mentoring program will significantly impact the classroom (Jacob, 2007). Furthermore, researchers postulate teaching efficacy influences the amount of time and energy an educator will devote to their education and how dedicated they are to their role as a teacher and is based on the teachers' beliefs they can make a difference in student achievement (Bandura, 1997; Gibson & Dembo, 1984). Just as important, research has shown novice teachers' support in the first years of teaching develops a high sense of teaching efficacy (Hoy & Spero, 2005). Through this study, I wanted to identify various factors that impact an induction and mentoring program to understand better the relationship between novice teacher supports and increased teaching efficacy.

During the study, I examined the novice teachers' efficacy and elements of the induction and mentoring program that novice teachers believe impacted their pedagogical skills and teaching efficacy in the classroom using data collected throughout the 2020-2021 school year. The data analyzed came from the district induction and mentor coordinator and the Teacher Efficacy Scale (Woolfolk & Hoy, 1990) survey administered in the spring of 2021. From the question scales from Woolfolk & Hoy's Teacher Efficacy Scale (1990), I investigated further and followed up with novice educators' focus groups to better understand the differences in

responses, possibly due to variations in novice teacher scores on teaching efficacy. Through the follow-up, I explored the similarities and differences between the different survey submissions to understand better the viewpoints of the novice teacher participants, which guided the qualitative phase of the study. I gained insight that helped develop the semi-structured interview questions administered to the different focus groups through the follow-up. Through the information gained, the district reviewed the current supports provided by the induction and mentoring program and created any necessary modifications to benefit the novice teachers' efficacy and pedagogical skills. Due to my study's structure, my research design was sequential quantitative/qualitative because the second strand (qualitative) collection will be based on the first strand (quantitative).

Study Context and Participants

Willis ISD is a 4A school district in East Texas consisting of 5 campuses with a student-to-teacher ratio of 14.5:1 (TEA, 2019d). The total student population in Willis ISD is over 2,500, with a large population of students identified as low SES and eligible for free and reduced lunch (TEA, 2019d). The district's student ethnicity distribution is 64% white, 25% Hispanic, 5% African American, and less than 5% making up other student ethnicities (TEA, 2019d).

Currently, novice teachers', including beginning educators with 0-5 years of experience, are almost 30% of the total number of teachers in Willis ISD (TEA, 2019d). Compared to the state, the district is lower by approximately 5% than the state average in the number of teachers with 0-5 years of experience (TEA, 2019d). In Willis ISD, novice teachers in years 0-1 make up almost 10% of the teaching staff (TEA, 2019d). During the 2021-22 school year, there were 24 novice teachers and 18 novice teacher participants in the study.

All the novice teacher participants were asked to submit consent before answering the items on the survey administration through Google forms. The participants were reminded of their voluntary participation before the focus group interviews that followed the survey. I collected additional data from the district coordinator for mentoring and induction, including their demographics and information relating to their mentor teacher. I did not collect information from the mentor teachers in the district because I had access to data submitted by the mentor teachers on novice teacher observations multiple times throughout the year. The district induction and mentor coordinator provided it. The demographic data collected from the novice teacher participants included the novice teachers' age, race, gender, degree type, certification and grade level, classes taught, average class sizes, and alternative certification or certification through a traditional program.

The structure of Willis ISD's induction and mentoring program is multifaceted. During the first phase of the program, each novice teacher attended a new teacher orientation where they were assigned to a mentor. The orientation is a two-day training that provides instruction and support for novice teachers in classroom management, instructional strategies, and lesson planning. During the school year, the expectation of mentors is to meet with the novice teachers each month and observe at least once per grading period, either through observations or reflections of daily activities. After the observation, the mentor teachers should provide feedback and coaching to the novice teacher. The district induction and mentor coordinator support the development of the novice teachers by personally observing each novice teacher once per grading period and discussing the different needs with the principal and by meeting monthly with all novice teachers face to face to answer any questions, address concerns, gather data, and explain the focus pedagogical skill for the month. The district mentor coordinator also provided

an optional meeting for novice teachers each month to discuss novice teacher needs and focus on the selected pedagogical skill.

Willis ISD's induction and mentoring program was in response to the need for support for novice teachers and the growing attrition rate. As defined by the research in Chapter 2, novice educators are more likely to exit the education profession between the first and fifth years (Ingersoll, 2003). In Willis ISD, the attrition rate has risen to more than 20% and has remained there for more than five years (TEA, 2019d). Also, the number of teachers with three or fewer years of experience is higher than the state average for more than five years (TEA, 2014; 2019d). Based on these needs, I evaluated the action/intervention plan's results to determine changes in the application of knowledge, instructional use, and classroom management skills. If changes occurred, did these changes improve teaching efficacy scores and novice teacher perspectives of the induction and mentoring program elements that support the development of pedagogical skills in the profession?

Proposed Research Paradigm

This mixed-methods study was administered to novice teachers throughout the Willis school district to offer insight into the induction and mentoring program. The purpose of this mixed-methods study's evaluation phase was to understand the effectiveness of an induction mentoring program on novice teaching efficacy scores and the induction and mentoring program elements that promote the development and application of pedagogical skills. The data collected in the study was intended to determine how the district can better support novice teachers by highlighting the current strengths and weaknesses and offering suggestions for improvement to the induction and mentoring program. To measure these findings, I implemented an exploratory sequential mixed-method approach.

Data Collection Methods

The design of this action research was structured as an explanatory sequential mixed methods design. There was both a collection of quantitative data followed by qualitative data to gain insight into the induction and mentoring program and understand the varying perspectives and viewpoints of the novice teachers. The purpose of using the explanatory sequential mixed methods design was to use the same novice teachers in both the quantitative and qualitative phases and interpret the variables' interrelationships (Creswell, 2014).

For the quantitative collection phase, I administered the Teacher Efficacy Scale short-form survey created by Woolfolk and Hoy (1990) based on earlier research from Gibson and Dembo (1984) to the novice teachers in the Willis ISD school district. The 30 questions in the original Teacher Efficacy Scale (Gibson & Dembo, 1984) included the measure of personal teaching efficacy and general teaching efficacy later shortened to 10 items in the short form (Woolfolk & Hoy, 1990). The long-form from Gibson and Dembo (1984) was shortened by other researchers, including Podell and Soodak (1993) as well as Woolfolk & Hoy (1990), because a few items were found to load on general teaching efficacy and personal teaching efficacy, not load on either, or might be a general teaching efficacy item that would load on personal teaching efficacy (Tschannen-Moran et al., 1998). Woolfolk and Hoy (1990) determined their 10 questions that make up the short form include questions associated with only one factor. The 10 questions in the short form have five items on personal teaching efficacy and five general teaching efficacy items (Woolfolk & Hoy, 1990).

The Teacher Efficacy Scale instrument (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990) requires teachers to respond based on their beliefs to statements indicating how the teacher can affect different scenarios based on a continuum scale of 1, which denotes "strongly agree" to 6

indicating "strongly disagree" (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990). The Teacher Efficacy Scale (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990) identified two teaching efficacy categories- personal teaching efficacy and general teaching efficacy (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990). Personal teaching efficacy is related to the educator's belief they have the competence to be in the classroom and their influence on student learning, given their knowledge and skill level (Gibson & Dembo, 1984). General teaching efficacy is the educator's belief in influencing student learning despite the environmental factors affecting students (Gibson & Dembo, 1984). In measuring teaching efficacy in both categories, researchers have found a strong correlation between teaching efficacy, the attitude and effort of the teacher, and student performance (Gibson & Dembo, 1984; Ross, 1994).

The survey's instrument reliability and validity have been confirmed in research (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990; Tschannen-Moran & Woolfolk Hoy, 2001). The short form's reliability from Woolfolk and Hoy (1990) was 0.77 for personal teaching efficacy and 0.72 for general teaching efficacy. Woolfolk and Hoy (1990) suggest that factor analysis should be done for every study used by the Teacher Efficacy Scale (Woolfolk & Hoy, 1990). Other data collected during the quantitative phase includes the novice teachers' demographics and general information. The novice teacher demographic information consisted of the age, race, gender, level, type of degree, certification type and grade level, the average class size of the novice teacher, the total number of students they teach, and the number of different classes they teach. Additional data collected from the novice teachers will indicate if the novice teachers received preservice teacher training through a traditional certification program or if the teacher was alternatively certified.

I also gathered information on traditional and alternatively certified teachers because those entering education through the alternative certification route have increased by more than 62% from 2013 to 2018 (TEA, 2019a). Alternatively certified teachers during the 2017-2018 school year accounted for more than 50% of the profession's new teachers (TEA, 2019a). By holding a bachelor's degree or higher from a university, alternatively certified teachers in the state of Texas can gain access to a teaching position within a short amount of time and begin employment with a teacher's salary while completing the nine steps the State of Texas requires (TEA, 2019b). However, these teachers often lack prior classroom experiences associated with a traditional certification program, meaning they have different needs in induction and mentoring program. In other words, we may not be able to use a one size fits all approach but must tailor our program to the needs of the novice educator. The district induction and mentor coordinator facilitated the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990) and demographic information was collected at the monthly novice teacher meeting. It was estimated to take no more than 10 minutes to complete.

Other data provided by the district induction and mentor coordinator included a survey and questionnaire as well as observations of novice teachers. Through the observations, surveys, and questionnaires, I gained insight into teaching efficacy and induction and mentor program elements that promote novice teachers' pedagogical skills development throughout the 2020-21 school year. Novice teacher observations conducted by the mentor teacher and the district induction and mentor coordinator were completed on an observation form created by the district induction and mentor coordinator based on the district appraisal rubric. The form was completed by mentors and the district induction and mentor coordinator multiple times throughout the school year and then followed up with face-to-face meetings to debrief the observation and

explanation of feedback after each observation. Other general information collected from novice teachers includes data about their mentor teacher indicating the amount of time spent with their mentor teacher, if the mentor and novice teacher shared the same content and grade level, and how the novice teacher's perceptions influenced their overall experience with their mentor teacher. During the qualitative collection phase, I used semi-structured interview questions during focus groups with novice teachers. The semi-structured questions asked during the interviews were developed based on the novice teachers' responses during the quantitative phase. I asked emerging questions to the five focus groups from each campus to gather additional information beneficial to the data collection process. During the interview, I took handwritten notes and recorded responses.

I also interviewed the district coordinator for mentoring and induction on their observations about the novice teachers' program and participation throughout the inaugural year of the induction and mentoring program. I requested that the district coordinator share their notes from classroom observations throughout the year and surveys taken from the beginning, middle, and end of the year. The information from the district coordinator and my reflective field journal were used as a tool to provide additional perspective to help in the analysis process as I looked for themes to explain the survey findings (the quantitative strand).

Justification of Use of Instruments in Context

For this study, I used the Teacher Efficacy Scale developed by Gibson and Dembo (1984) which was later modified by shortening the original survey (Woolfolk & Hoy, 1990). (See Appendix I) The survey measured the teachers' attitudes and beliefs towards students (Gibson & Dembo, 1984). The survey instrument from Gibson and Dembo (1984), later modified by Woolfolk and Hoy (1990), was validated and proven reliable (Tschannen-Moran & Hoy, 2001).

Using this survey on teaching efficacy, I measured general teaching and personal teaching efficacy (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990). General teaching efficacy is the educator's belief they [the teacher] affect student learning despite external factors, and personal teaching efficacy is the educator's belief in themselves and their capabilities as a teacher [internal] (Gibson & Dembo, 1984).

Another quantitative measure obtained during the study includes the novice teacher demographics and general information survey. By obtaining novice teacher demographics, I was able to understand better the different factors that might contribute to teaching efficacy and the elements of the induction and mentoring program that promoted the development of pedagogical skills. The demographic and general information survey collects personal information from the novice teachers and asks questions based on their mentor teacher's perspectives. With this information, I provided insight and a better understanding of novice teachers' backgrounds and how these factors might influence the induction and mentoring program's effectiveness.

The additional survey, questionnaire, and observation data collected by the district induction and mentor coordinator offered insight on teaching efficacy throughout the 2020-21 school year and the elements of the induction and mentoring program that promoted the development of pedagogical skills of the novice teacher. I used the data provided by the district induction and mentor coordinator to offer insight into the novice teacher's efficacy and development of pedagogical skills throughout the 2020-21 school year. Using additional data sources helped with the triangulation of data and the multiple sources of data strengthened the validity of the data (Creswell, 2014).

The quantitative results received from the survey indicated the types of qualitative semi-structured questions that were asked based on the novice teachers' answers (Creswell, 2014).

Focus groups were formed by campus, and the qualitative interview questions were developed based on the quantitative results. The semi-structured interview questions gathered data from the novice teacher focus groups to better understand their perceptions and beliefs. I anticipated a need to conduct the focus groups because the participants are novice teachers and are individuals with varying views. The focus groups helped the sequential study because they identified factors with an in-depth explanation that could benefit or hinder the induction/mentoring program.

Data Analysis Strategy

In this mixed methods study that included quantitative followed by qualitative (Quan → Qual MMAR study), the quantitative results were given priority based on the overall picture I hoped to construct of the district's teacher induction and mentor program and used the qualitative data to highlight ways we could enhance the program by looking at teachers who excelled in growth. Integration in the process occurred in several places in the study. The integration was seen in the mixed research question, which incorporates the quantitative and the qualitative methods. Also, the integration occurred at the joint display, report writing from the quantitative and the qualitative results, and after the qualitative results were analyzed and combined with the quantitative data to complete the study.

During the quantitative strand, I used nonprobability sampling by selecting the novice teachers in years 0-1 of their career based on their involvement in the district's teacher and induction mentor program (Creswell, 2014). The sampling strategy I employed was convenience sampling. Convenience sampling was utilized because the teacher and induction program novice teachers participated in was voluntary (Creswell, 2014). The novice teachers in the sample were administered the Teacher Efficacy Scale (Woolfolk & Hoy, 1990) and the demographic survey.

From these instruments, data was collected based on the 6-point Likert scale on teaching efficacy and demographic information used in the data analysis process.

With the data, I then used descriptive statistics to analyze the survey results from the Teacher Efficacy Scale (Woolfolk & Hoy, 1990) administered to novice teachers. Descriptive statistics were used in the quantitative data analysis, including variability measures such as the mean, range, variance, and standard deviation. Finally, I collected the demographic data, and general information on the novice teachers' mentors sorted and categorized them to identify any commonalities or differences. I determined the interview questions needed to further explain the survey results with this information.

Table 1

Semi-Structured Interview Questions for Focus Groups

1. What makes you feel supported as a teacher? What might make you feel more supported as a teacher through the induction and mentoring program?
 2. How did you feel about the induction program at the beginning of the year? Was there anything we could have added/taken away that would have made you feel more supported?
 3. What component of the program do you feel was the most beneficial? Least beneficial? Is there an area that we overemphasized or did not emphasize enough?
 4. How has the program helped/not helped you gain the strategies you needed to be successful as a novice classroom teacher?
 5. How do you feel about the mentor support provided to you throughout the year? Was there anything we could have added/taken away that would have made you feel more supported?
 6. Do you feel like your mentor was prepared and willing to help in your growth as a teacher?
 7. Do you feel more confident or less confident after participating in the program? Why? Do you feel more successful or less successful after participating in the program? Why?
 8. If you could give advice to a new teacher entering education, what would it be? If you could give advice to a new teacher entering the district, what would it be?
 9. Is there anything else you could add that would help me better understand your experience as a novice teacher?
 10. In what ways could we change the induction and mentoring program to better support novice teachers?
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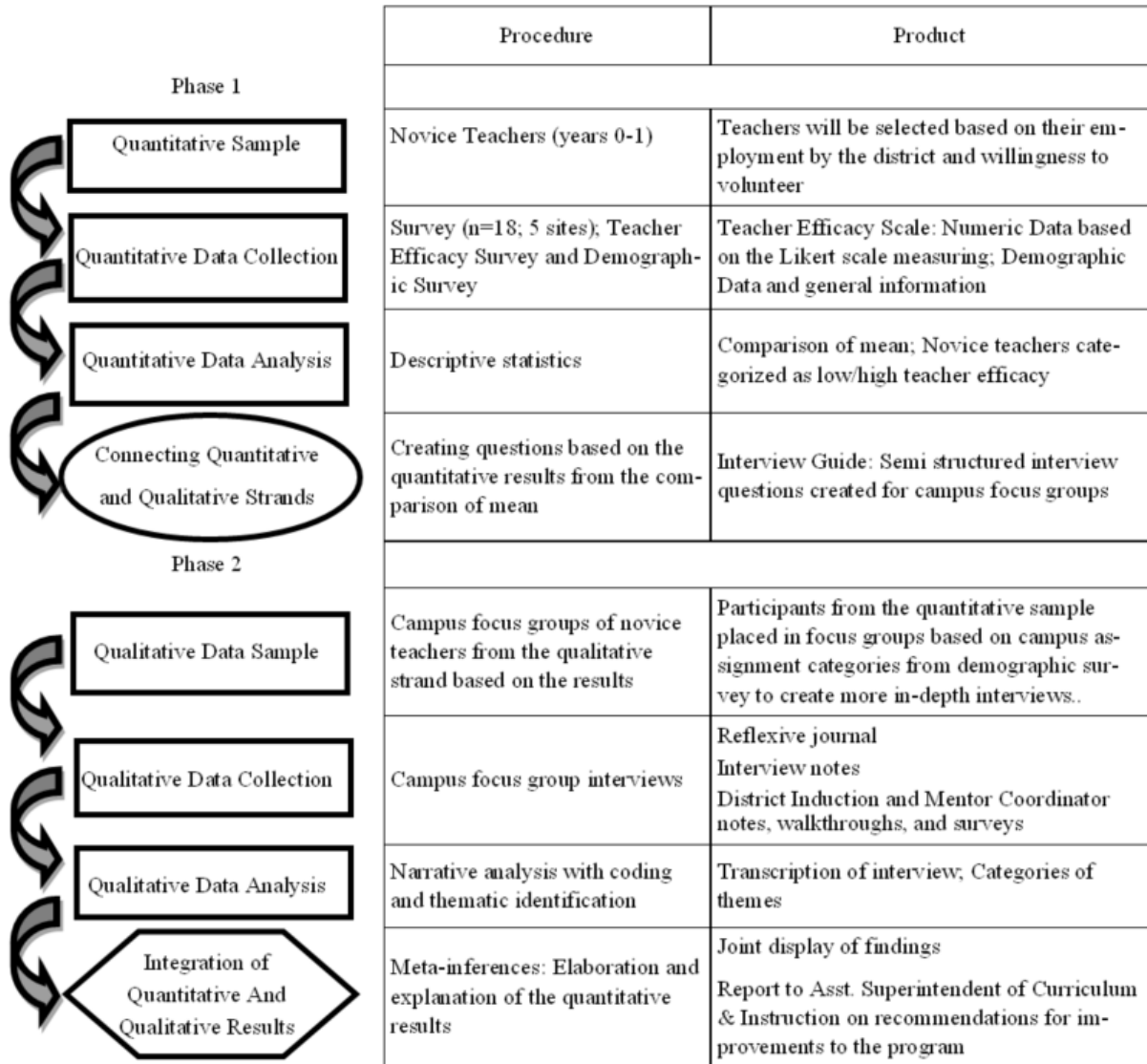
During the qualitative strand, I used an identical sampling method of the novice teachers from the quantitative strand. The sample set for the second qualitative strand was sorted into focus groups based on their campus assignment. During the interviews, I gathered more information and elaborated on any differences between campus groups and trends seen during the quantitative analysis. The campus focus groups were then asked the questions developed from the quantitative strand's data.

The qualitative strand was conducted as an inductive, emergent analysis of the novice teachers based on any variability in the scores during the quantitative strand and focused on the educators' perceptions of how the induction program affected their efficacy and influenced the perspective of the components of the induction and mentoring program. The inductive, emergent analysis was achieved using the information gathered and transcribed from the semi-structured interview questions, notes, reflexive journal, district induction and mentor coordinator notes, walkthroughs, and surveys to examine emerging themes. Once I determined the themes, I then used the information to place the data in categories and sorted information to look for patterns to help explain and elaborate the quantitative results.

The data analysis results were represented in a joint display of the quantitative and qualitative results looking specifically at how the qualitative findings from the analysis of the interviews, notes, data collected from the district induction and mentor coordinator, and reflexive journal to help explain the data results from the survey in the qualitative strand. Finally, I used the data collected to develop a presentation that identified the needs and reported the information so that the district could modify the induction/mentoring program.

Figure 1

Data Collection and Analysis Process



Timeline

The study began in the spring of the 2020-21 school year. The timeline was appropriate because it allowed time to administer the Teacher Efficacy Scale (Woolfolk & Hoy, 1990) and gain novice teachers' access at the end of their first year of the induction and mentor program. During this time, the novice teachers shared their perceptions after participating in the induction and mentoring program's inaugural year. I then analyzed the action/intervention plan results to

see if it produced change in the knowledge, instructional, and classroom management skills to improve teaching efficacy and induction and mentoring program components that affect the novice teacher's pedagogical skills in the classroom. This timeline evaluated and determined teachers' characteristics based on their demographics and general information survey. The data results were also interpreted from the study (Quan) of mentor teachers and new teachers and focus group interviews (qual). Once the information from both the quantitative and qualitative strand had been collected and analyzed, the information was presented to the Assistant Superintendent of Curriculum and Instruction and the district's induction and mentoring program coordinator.

Table 2

Timeline for Research Activities

Activity	Description
1	Meet and discuss the study and schedule of activities with the Assistant Superintendent of Curriculum and Instruction and District Induction and Mentor Coordinator
2	Administer the Teacher Efficacy Scale (Woolfolk & Hoy, 1990) and demographics survey
3	Conduct quantitative data analysis and create semi-structured interview questions
4	Schedule and administer the focus group interviews on campus
5	Meet with the District Induction and Mentor Coordinator to collect notes, walkthroughs, and surveys collected throughout the year
6	Qualitative data analysis and integration of the two strands
7	Presentation to the Assistant Superintendent of Curriculum and Instruction and District Induction and Mentor Coordinator to deliver findings

Reliability and Validity Concerns or Equivalents

This action research study was created to understand the novice teachers' beliefs about the induction and mentor program's effects on their first year in the classroom in Willis ISD. Due to the researcher's involvement in action research, I identified and was aware of my inherent

biases because I was employed in the district where I conducted the study. Also, I set aside my own biases through the data collection and worked with the participants during both phases of the study to reveal the participants meaning behind the responses (Creswell, 2014). As I went through each step of the study, I clarified any personal background, prior relationships, and biases through reflexivity (Creswell, 2014).

In an explanatory, sequential mixed methods study, additional issues with validity were addressed (Creswell, 2014). One specific area I was conscious of during my research included exploring all possible factors that could emerge during the quantitative phase (Creswell, 2014). Also, I understood the structure of the qualitative phase must build on the quantitative phase. Therefore, the data collected was from the same group of novice teachers (Creswell, 2014). I maintained validity during the qualitative phase by keeping detailed notes during the semi-structured questions administered to the campus focus groups. This process was vital because of the emergent design. Furthermore, I kept detailed notes of the novice teacher responses during the campus focus group interviews, including any questions and factors revealed (Creswell, 2014).

In the data collection process, there were several opportunities I was able to take advantage of to maintain the integrity of the data. One method of verification I used was triangulation (Creswell, 2014). Using triangulation, I confirmed the validity of my data through interviews, notes, and journals. I also collected detailed descriptive data from the interviews and complete notes on the study's context and details, such as setting and participants from the subset in the quantitative strand, which confirms the transferability of information. I kept an audit trail of the procedures I collected through interviews and journals in my notes. I also kept notes on how I conducted the procedures and interpreted the results. My researcher notes provided a

detailed, substantial description of how I completed the surveys, the study setting, and the participants. These same standards were kept as I conducted the focus group interviews. By collecting information through the different methods in the quantitative and qualitative phase and multiple data sources, I reduced the potential bias that may occur if it were a study with only one instrument and a single-phase design and enhanced the validity of the data.

Closing Thoughts on Chapter 3

The information obtained from this study was significant because it determines the changes necessary to the induction and mentoring program that impact novice teachers hired by the district in the future. The study collected data on identical novice teachers' perceptions of teaching efficacy. It also looked at their pedagogical skills using a Teacher Efficacy Scale (Woolfolk & Hoy, 1990), a demographic survey, and semi-structured interview questions administered in focus groups. The qualitative strand data was used to explain ratings of the same constructs found in the quantitative strand. The meta-inferences of combining results presented a picture of how the district might make any needed modifications to the induction and mentoring program to benefit future novice teachers. This study was appropriate and necessary as Willis ISD supports novice teachers through the induction and mentoring program to meet their needs. The following summary in Chapter 4 provided a complete representation of Willis ISD's induction and mentoring program's effectiveness through the data analysis.

CHAPTER IV

ANALYSIS AND RESULTS/FINDINGS

Introducing the Analysis

This chapter reports the descriptive analysis and results from the survey and follow-up questions administered to novice teachers in Willis ISD. The study was designed as a mixed-methods study with both quantitative and qualitative data from the same group of novice teacher participants, and the details of the process are outlined in Chapter 3. The survey collected demographic information through a questionnaire and novice teachers' attitudes and perspectives based on the 10 items from the Short Form of the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990). 18 novice teachers in the district participated in the survey out of the 24 novice teachers in years 0-1 employed by Willis ISD in the 2021-2022 academic year.

In the first part of the analysis, I used descriptive statistics to delineate the demographic information. I organized and analyzed the demographic information correlated with the results of the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990). The analysis of the novice teachers' survey responses yielded categorization into either high educator teaching efficacy or low educator teaching efficacy based on the total mean score of their responses on the Teacher Efficacy Scale survey. I further analyzed novice teacher responses based on the general teaching efficacy (GTE) subscales and personal teaching efficacy subscales (PTE). After completing the analysis of the two part-survey, I generated descriptive statistics of the survey data. When correlating the survey data results to the self-reported demographic data, I found I could not contribute any of the results to demographics. Furthermore, after reviewing all demographics and survey results, I found no indication that demographics played a factor in the results of this survey. Combined, the analysis of the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990)

and demographic data questionnaire provided information about the novice teachers in Willis ISD and their attitudes and beliefs surrounding their individual ability to affect student achievement in the classroom.

I conducted semi-structured focus group interviews with the novice teacher participants after reviewing and analyzing the data from the survey. I formed focus groups based on campus participation. Following transcription of these interviews, I created a narrative analysis to determine common themes and trends. I also collected and analyzed data from the district mentor coordinator to determine whether any additional themes emerged and establish whether my data analysis supported or refuted themes resulting from the survey and semi-structured interviews.

Presentation of Data

The novice teachers participating in the study were administered a questionnaire to gather basic demographic information, and the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990) was used to gather participants' attitudes and perceptions of teaching.

The following research questions guided the study:

1. Were there any statistically significant differences in novice educators' teaching efficacy based on demographic factors? Were there any statistically significant differences in the reported general teaching efficacy based on demographic factors? Were there any statistically significant differences in the reported personal teaching efficacy based on demographic factors?
2. Were there any statistically significant differences in the reported teaching efficacy (general or personal) attributed to the path of teacher certification?
3. Were there any elements of the induction and mentoring program that novice teachers believe impacted their pedagogical skills and teaching efficacy?

Results of Research

The 18 novice teacher participants in the district mentoring program had 0 or 1 year of teaching experience. The demographic data collected from each novice teacher included: age, gender, race, the highest level of education completed, college degree and major, if a novice teacher was certified for their current position, their teaching assignment in the 2020-21 school year, grade level taught, average class size, and the number of years of experience in teaching. In addition, data were collected from novice teachers about their pathway to teacher certification. The two choices for certifications were limited to the alternatively certified programs such as iTeachTexas or Texas Teachers of Tomorrow or a traditional teacher certification program through a university, which included student teaching and/or clinical experience before entering the classroom

Research Question 1. The questionnaire included demographic information on novice teachers. To answer the first research question regarding demographics, the novice teachers were asked to complete a questionnaire through Google forms, including the demographic questionnaire and the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990). The demographics questionnaire consisted of 12 questions. The questions were asked to understand the novice teachers and their backgrounds better.

The demographic information was correlated to responses from the Short Form of the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990), which consisted of 10 questions about novice teachers' attitudes and perceptions about teaching. The Teacher Efficacy Scale Short Form (Woolfolk & Hoy, 1990) includes items on a Likert scale from one to six, where 1= "strongly agree" and 6= "strongly disagree" (Woolfolk & Hoy, 1990). In the survey from Woolfolk and Hoy (1990), the two independent factors rated were personal teaching efficacy

(PTE) and general teaching efficacy (GTE). Educator's personal teaching efficacy survey items must be reversed scored (Woolfolk & Hoy, 1990). For example, on the personal teaching efficacy item, "If I try really hard, I can get through to even the most difficult or unmotivated students," the item must be reversed so the scoring of 6, which is "strongly disagree," should receive a rating of 1 instead of 6 (Woolfolk & Hoy, 1990). The information was then analyzed by the total mean score, and novice educators were sorted into low and high teaching efficacy.

Table 3 compares low/high teaching efficacy with the age group of novice teachers. There were five novice teachers in the 20-25-year-old age group, and three of these teachers reported low teaching efficacy. Novice teachers 30 years and younger consisted of half of the educators with reported low teaching efficacy. Those with low teaching efficacy were evenly distributed over the 31-35, 36-40, and 40-51+ with two in each group. The educators categorized as having high teaching efficacy had the most significant number in the 31-35 and 36-40 categories with five total. In addition, novice teachers who were 30 years and younger appear to have lower teaching efficacy than older ones.

Personal teaching efficacy and general teaching efficacy were analyzed for statistically significant data, but the information did not have any results that could be reported since the effect size of novice teachers participating in the survey was so small. While not statistically significant, comparing the demographics related to ages of novice teachers to General Teaching Efficacy (GTE), the data did reveal the novice teachers in the 31-35 and 36-40 (n=9) age groups had the highest means related to General Teaching Efficacy. In the 31-35 age group, the mean was 4.15, and for the 36-40 age group was 4.32. Personal Teaching Efficacy (PTE) compared to the ages of novice teachers did not reveal any notable information to report.

Table 3*Novice Teacher Age by Low/High Teaching Efficacy*

<u>Age Group</u>	<u>Low Teaching Efficacy</u>		<u>High Teaching Efficacy</u>	
	Frequency	Percent	Frequency	Percent
20-25	3	30.0	2	25.0
26-30	2	20.0	1	12.5
31-35	2	20.0	2	25.0
36-40	2	20.0	3	37.5
40-51+	1	10.0	---	---
Total	10	100.0	8	100

Overall, there are more female teachers in the district regardless of experience. The data is displayed in Table 4. There was an equal number of female novice educators with high and low teaching efficacy.

Demographics related to gender were compared to the reported PTE and GTE scores. Although there were equal numbers of female teachers with both low and high teaching efficacy, it was found that more female teachers had a higher GTE than males. Females' GTE mean score was 4.072, and the males' PTE was 3.45. Comparing the PTE of the males and females showed a similar mean score of 1.9 and the males' score was 2.05 (see Table 4).

Table 4*Novice Teacher Gender by Low/High Teaching Efficacy*

<u>Gender</u>	<u>Low Teaching Efficacy</u>		<u>High Teaching Efficacy</u>	
	Frequency	Percent	Frequency	Percent
Female	7	70	7	87.5
Male	3	30	1	12.5
Total	10	100.0	8	100

I analyzed the data to determine whether any relationships between teaching efficacy and the race of the novice teacher emerged. I found no statistically significant difference in the overall reported teaching efficacy measures when correlated with the novice teacher's race.

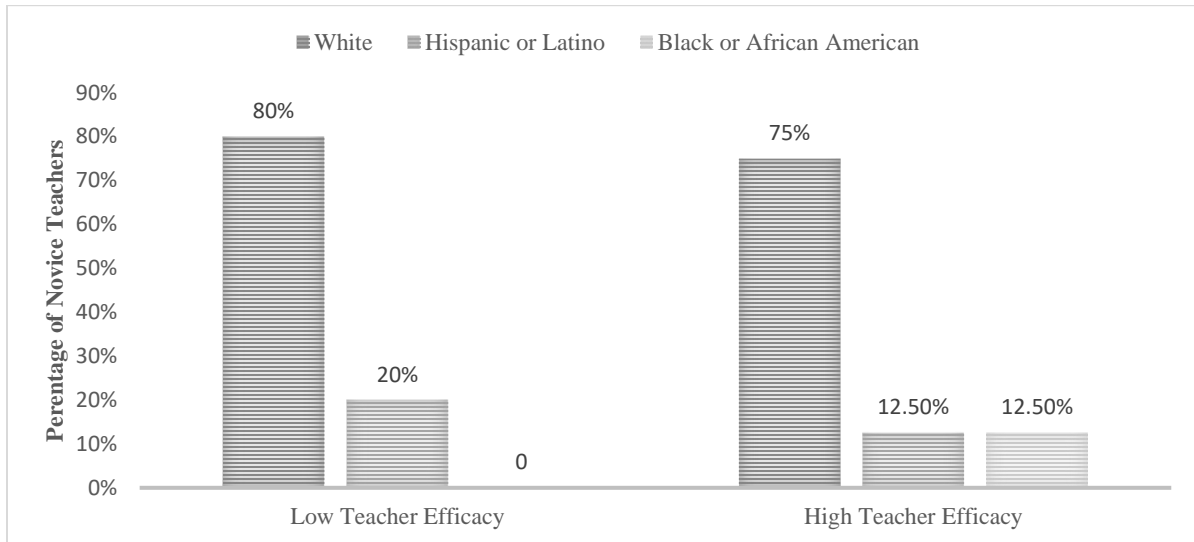
Figure 2 represents these findings. Overall, there were more white novice teachers(n=14) in Willis ISD when compared to Black or African American (n=1) and Hispanic or Latino (n=3). White novice teachers had the highest percentage of both high and low teaching efficacy. Those identified as Hispanic (or Latino) and Black (or African American) scored 12.5% in aggregate in the categories of high and low teaching efficacy.

The data comparing race and GTE reveals that those identifying as Black or African American had a higher mean average with a score of 4.8 than those who identify as White (3.828) and those who identify as Hispanic or Latino (4.132). Reflecting on the data for GTE reveals that the second question, “If students aren’t disciplined at home, they aren’t likely to accept any discipline,” had the lowest mean score of 2.93 for those who identify as White. While it was also the lowest scoring question for those who identified as Black or African American (4.0) and those who identified as Hispanic or Latino (3.0), the data revealed that the mean score was lowest for White.

Examining the data on race and PTE, the data reveals that the novice teachers who identify as Hispanic or Latino had a mean score of 1.534. Because PTE is reverse scored, this is the highest mean score for race regarding Personal Teaching Efficacy (PTE). Those who identified as White had a mean score of 1.986. Those who identified as Black or African American had a mean average of 2.4. When reverse scored, Black or African American had the lowest mean score for PTE.

Figure 2

Novice Teacher Race by High/Low Teaching Efficacy



Novice teachers in the district were surveyed to determine their certification pathway. Teachers in the district were either alternatively certified through a program such as iTeachTexas and Texas Teachers of Tomorrow or were traditionally certified through a university that includes student teaching/clinical experience before entering the classroom. It was found that only one out of the 18 novice teachers had received their certification through the university route, while 17 had received or were completing their certification through an alternative certification route. The data presented in Table 5 shows teachers by certification pathway compared to the Teacher Efficacy Scale survey data (Woolfolk & Hoy, 1990). While the data was not statistically significant because there was only one traditionally certified participant, slightly more teachers indicated low teaching efficacy when isolating those who were alternatively certified.

The GTE mean score for the novice teacher who was certified through the traditionally certified route through a university was 5.6. The GTE mean score for the 17 teachers who went through the alternatively certified routes was 3.834. For those who were alternatively certified,

question two which addressed discipline at home, was the lowest compared to the other GTE questions, with a mean score of 2.82. The overall PTE mean score for the alternatively certified novice teachers (1.964) and the one novice teacher certified through the traditionally certified route (1.4) was similar, with a difference of .564.

Table 5

Comparison of Efficacy by Teacher Certification Program.

<u>Certification Program</u>	<u>Low Teaching Efficacy</u>		<u>High Teaching Efficacy</u>	
	Frequency	Percent	Frequency	Percent
Teacher Certification Program through a University with Student	--	--	1	12.5
Alternatively Certified (ex. Texas Teachers of Tomorrow; Region 10; iTeachTexas; etc.)	10	100	7	87.5
Total	10	100.0	8	100

Table 6 shows the novice teacher participants' Teacher's Efficacy compared to Employment Status for the 2021-2022 academic year. The number of novice teachers participating in this study returning to the district for the 2021-22 school year with high teaching efficacy was slightly lower than the number of novice teachers returning with low teaching efficacy. The number of teachers with low and high teaching efficacy was seven, although, in the following 2021-22 school year, one of the individuals was moved to a non-teaching position within the same campus. It is important to note that six novice teacher participants were no longer in the district the following 2021-22 school year and one was no longer in a teaching position. Of these six teachers, three had low teaching efficacy, and three had high.

Furthermore, one of the three teachers with high teaching efficacy was no longer in the education profession in the 2021-22 school year. The novice teacher's employment status for the 2021-2022 academic year was compared to the mean score for GTE. Overall, the mean GTE scores for each group were similar to those still in the district at the same campus but in a

different teaching position being the highest GTE mean score at 4.28. The lowest mean GTE score was for those teaching in another district at 3.76. The overall PTE mean score for novice teachers was similar, with a mean score of 1.72 and a variance of 0.32.

Table 6

Novice Teacher Status in the 2021-22 School Year by Low/High Teaching Efficacy

<u>Campus</u>	<u>Low Teaching Efficacy</u>		<u>High Teaching Efficacy</u>	
	Frequency	Percent	Frequency	Percent
Still in District in the Same Teaching Position	3	30	2	25
Still in District at Same Campus but a Different Teaching Position	2	20	3	37.5
Still in District but at Different Campus	1	10	---	---
Still in District but a Non-Teaching Position	1	10	---	50
Teaching in Another District	3	30	2	25
No longer in education	---	---	1	12.5
Total	10	100	8	100

Table 7 shows teaching efficacy for the participating novice teachers by campus. When examining the number of teachers with high teaching efficacy, more teachers had high teaching efficacy in grades 7-12. Novice teachers at primary and middle schools reported lower teaching efficacy, including head start to grade six.

In reviewing novice teacher status by the campus for the 2021-22 school year, the GTE for the Junior High School was the highest, with a mean score of 4.72. The High School and Intermediate data revealed a similar low mean score. The High School mean score was 3.0, and the Intermediate was 3.2. Interestingly, question 2 was low for all campuses, with a mean score of around 2.0. However, the Junior High data on question two had a mean score of 4.0.

For PTE, Primary had a mean score of 1.6, and since it is reversed scored, the Primary was the highest of all campuses. The lowest score of all campuses was the High School, with a

mean score of 2.734. Question six had the lowest combined mean PTE score at 2.44 for all campuses and states, “If a student did not remember the information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.”

Table 7

Novice Teacher Status by Campus in the 2021-22 School Year by Low/High Teaching Efficacy

<u>Campus</u>	<u>Low Teaching Efficacy</u>		<u>High Teaching Efficacy</u>	
	Frequency	Percent	Frequency	Percent
Primary	3	30.0	2	25
Intermediate	1	10.0	--	--
Middle School	3	30.0	1	12.5
Junior High	1	10.0	4	50
High School	2	20.0	1	12.5
Total	10	100.0	8	100

Research Question 2. Novice teachers were asked to complete the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990). The purpose of the administration of the survey was to collect data about the perceptions of the novice teachers towards their students and teaching on questions regarding personal teaching efficacy (PTE) and general teaching efficacy (GTE) (Woolfolk & Hoy, 1990). Personal teaching efficacy is the educators’ belief they have the necessary expertise and capability to influence student learning (Gibson & Dembo, 1984). In other words, “My teaching makes a difference.” General teaching efficacy is the teacher’s belief in influencing student learning despite the environmental factors affecting students (Gibson & Dembo, 1984). In other words, “other factors impact the students learning.”

The survey results are displayed in Table 8 and are divided by novice educators found to have low and high teaching efficacy. As mentioned previously, the Teacher Efficacy Scale Short Form (Woolfolk & Hoy, 1990) includes items on a Likert scale from one to six where 1= “strongly agree” and 6= “strongly disagree” (Woolfolk & Hoy, 1990). The high and low efficacy

score was calculated using the total mean score from the Teacher Efficacy Scale (Woolfolk & Hoy, 1990). In addition, personal teaching efficacy survey questions 3, 6, 7, 8, and 9 must be reversed scored (Woolfolk & Hoy, 1990).

Overall, slightly more educators reported low teaching efficacy than high teaching efficacy with a ratio of 10:8. The greatest mean differences noted are in items 1, 4, and 10, and all three statements address general teaching efficacy, which includes students' home and family background and how these factors affect student learning and the ability of the teacher to influence student learning (Gibson & Dembo, 1984). There were no statistically significant differences in the mean on statements 3, 6, 7, and 9, which address personal teaching efficacy, and question 8 had no mean difference.

Table 8

Novice Teacher Responses on Teaching Efficacy Sorted by Low/High Teaching Efficacy

<u>Teaching Efficacy Questions</u>	<u>Low Teaching Efficacy</u> (n=10)		<u>High Teaching Efficacy</u> (n=8)	
	Mean	Standard Deviation	Mean	Standard Deviation
1. The amount a student can learn is primarily related to family background. (GTE)	3.60	.843	4.88	1.126
2. If students aren't disciplined at home, they aren't likely to accept any discipline. (GTE)	3.60	.843	4.13	1.126
3. When I really try, I can get through to the most difficult student. (PTE)*	1.80	.632	1.88	1.126
4. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement. (GTE)	3.70	1.059	4.63	.916
5. If parents would do more for their children, I could do more. (GTE)	3.20	1.398	3.75	.886

6. If a student did not remember information I gave in a previous less, I would know how to increase his/her retention in the next lesson. (PTE)*	2.40	.966	2.50	.926
7. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly. (PTE)*	1.60	.699	1.75	.707
8. If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. (PTE)*	2.00	.471	2.00	.756
9. If I try really hard, I can get through to even the most difficult or unmotivated students. (PTE)*	1.80	.789	1.63	.744
10. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment. (GTE)	4.60	1.075	5.38	1.061

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***Reversed scored**

Research Question 3. Are there any elements of the induction and mentoring program that novice teachers believe impacted their pedagogical skills and teaching efficacy? In what ways can the district better support and build the teaching efficacy of novice teachers?

This question was asked to understand better the novice teachers' perceptions about their satisfaction with the knowledge and pedagogical skills gained from the induction and mentoring program provided by Willis ISD and how the district could better support and build their teaching efficacy. This data was collected from the semi-structured interview questions asked to campus focus groups and the data the district mentor coordinator shared from novice teacher responses regarding the induction and mentoring program throughout the year. Both data collection sources were integral in answering question 3.

Figure 3 was collected from the district mentor coordinator on novice teachers' perceptions of the most challenging part of teaching during the 2020-21 school year. Seven of the 18 novice teachers indicated discipline and classroom management was the most challenging part of teaching. Another critical factor novice teachers indicated as challenging was the COVID-related factors and the local and state policies they had to follow related to COVID. Other factors novice teachers considered challenging included lack of time, lack of control and/or being ineffective, parents, planning, campus administration, and campus expectations.

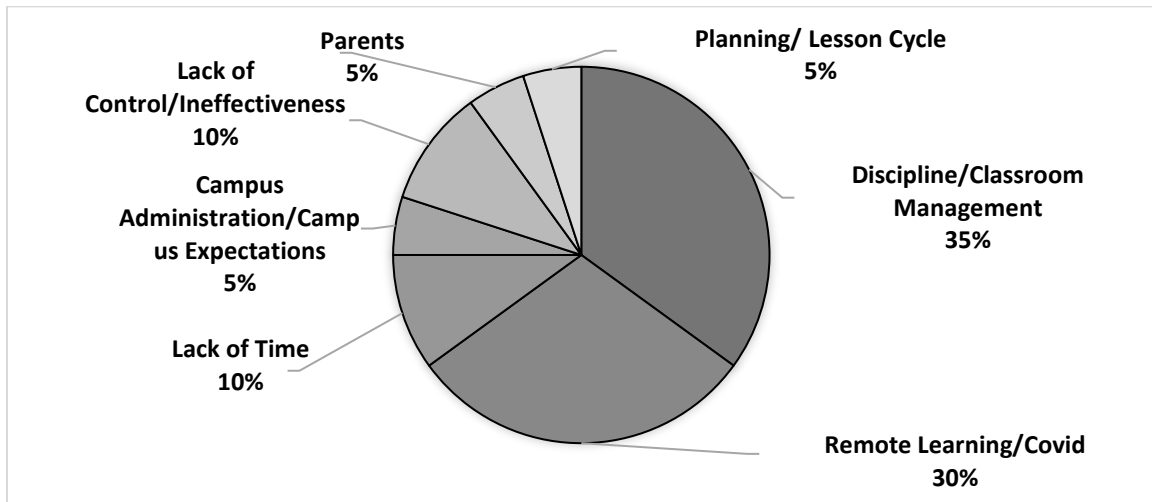
At the beginning of the 2020-21 school year, nine novice teachers overwhelmingly indicated they were excited about the program and felt that the induction and mentoring program support was needed to impact their experiences positively. One comment from a novice teacher who identified as a Hispanic male teaching third-grade math indicated they were excited about the program and "eager to participate." Another novice teacher who identified as a White female teaching high school English stated, "I thought it was great and it helped draw me to take the job at Willis ISD."

Only three novice teachers viewed the induction and mentoring program negatively at the beginning of the year. Two of the three novice teachers who identified as White Female in their late twenties teaching at the secondary level and still completing their alternative certification requirements viewed the novice teacher and induction program negatively. The novice teachers made statements about the induction and mentoring program such as "overwhelming" and "This is just one more thing I had to do." Another novice teacher who identified as a White male and taught a science-related subject and coached stated, "It felt like another thing I had to add to my list of things to do." All three novice teachers who responded negatively were teaching at the secondary level and still completing the requirements from their alternative certification

program during the 2020-21 school year, including when the data was collected in May of 2021.

Figure 3

Novice Teacher Perceptions on the Most Challenging Part of Teaching



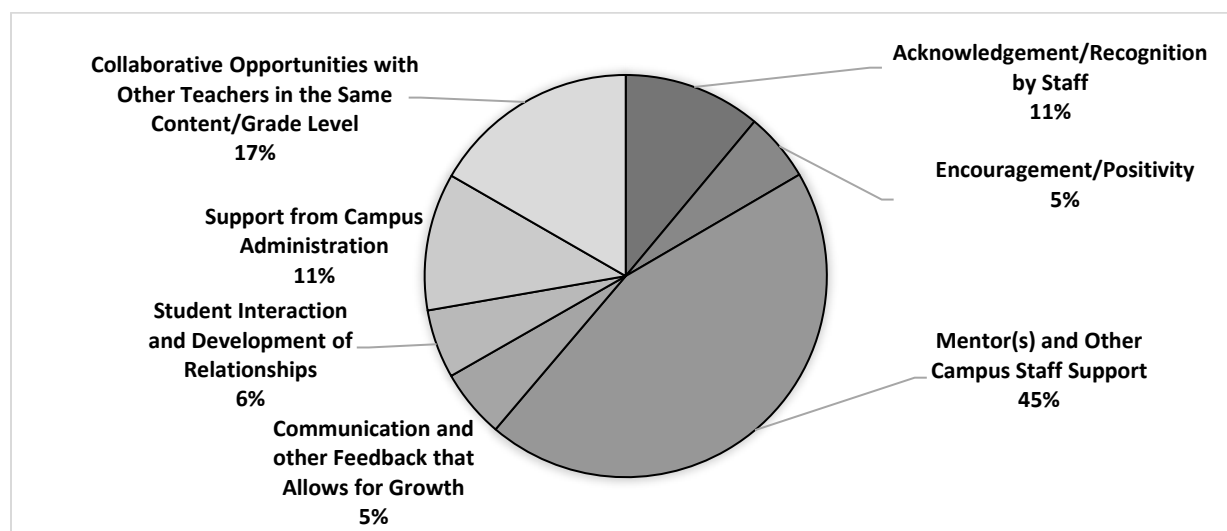
During the semi-structured interviews, the novice teachers stated they felt supported by the program, as shown in Figure 4. Over one-third of the novice teachers stated they felt most supported by the district mentor and other campus support staff but less supported by the campus mentor. The second most crucial factor novice teachers mentioned in the induction and mentoring program regarding support included collaborative opportunities with other teachers in the same content and grade level. Two factors novice teachers described as equally important in feeling supported included support from campus administration and acknowledgment and recognition by staff.

Additionally, novice teachers were asked how they might be better supported by the induction and mentoring program in the future. The most frequent responses from novice teachers included requests for more support in resources and planning, more time with the campus and district mentor, and peer modeling and observation opportunities. Of the novice

teachers’ responses, three indicated they would feel more supported if they had time and opportunities to collaborate with their peers and received more support from their campus mentor teacher. One teacher commented they could be more supported by having “A more hands-on approach from the mentor, I understand it was a hard year for everyone as COVID made everyone change their classroom, but I did not feel like the 10 minutes a month meeting with my mentor helped me in any way.”

Figure 4

Factors that Influence Novice Teachers’ Perception of Support



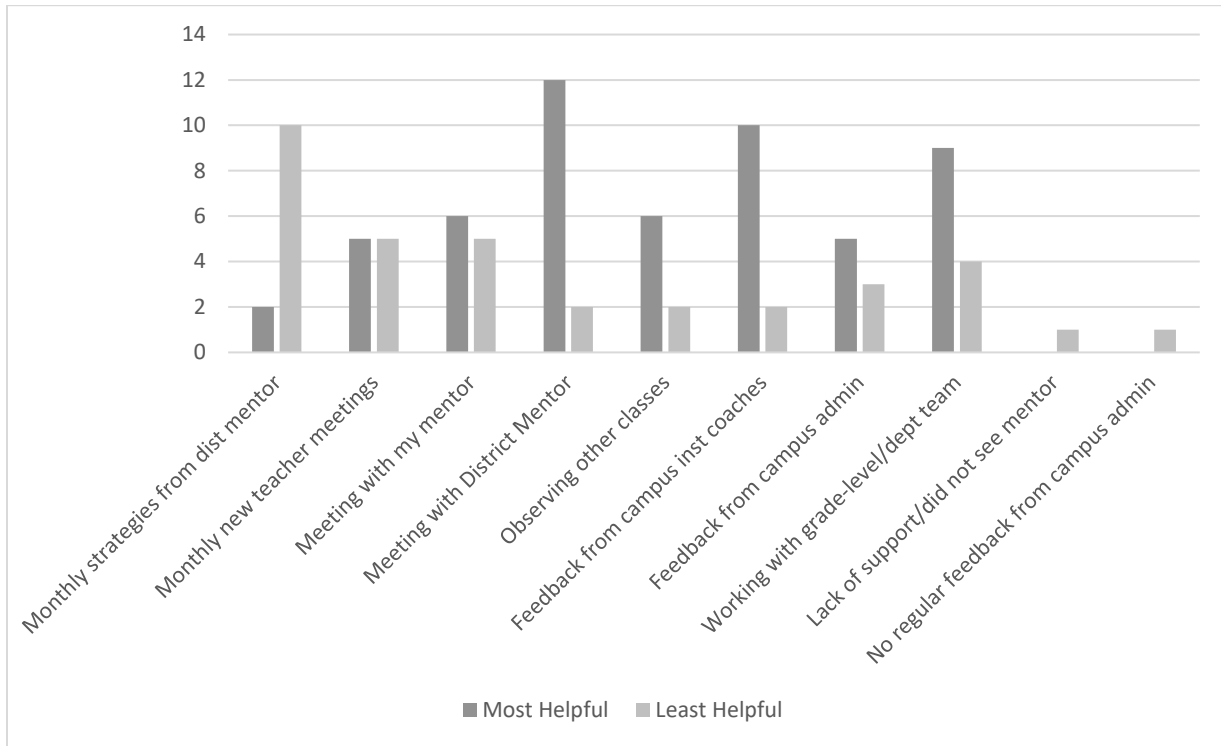
During the interviews, novice teachers were asked their perceptions about the program and the most beneficial and least beneficial aspects of the novice teacher induction and mentoring program. Approximately 12 of the 18 novice teachers indicated the support from the district mentor was the most beneficial. Three other areas novice teachers indicated as beneficial were professional development, meeting, planning with their team of teachers, and observations from the campus or district mentor followed by feedback. Eight of the novice teachers did not respond when asked if there was a component of the program that was the least beneficial; however, two indicated that the modules and assignments they needed to

complete as part of the district induction and mentoring program were the least beneficial and two stated they did not feel their campus mentor was beneficial. It is important to note that those who did not feel their campus mentor was beneficial also felt their campus mentor was not involved or had a limited role in the mentoring process.

The district mentor teacher surveyed the novice teachers at the end of the 2020-21 school year and asked about the resources and supports the induction and mentoring program provided and which supports the novice teachers perceived as helpful. Novice teachers indicated which resources and supports were “most helpful” or “least helpful.” As indicated in Figure 5, the novice teachers found the meetings with the district mentor the most helpful, followed by the feedback from campus instructional coaches and working with their grade level/department team. The components of the program novice teachers found to be least helpful included the monthly novice teacher strategies shared by the district mentor, meetings with other novice teachers led by the district mentor, and meeting with their campus mentor.

Figure 5

Resources and Support Perceived as Helpful from Novice Teachers



Novice teachers were asked to describe if their district mentor and/or campus mentor was prepared and willing to help their overall growth, including their pedagogical skills, as noted in Table 9. This question revealed that the novice teachers felt overwhelmingly supported by the district mentor teacher and that the support had led to positive growth as an educator. The data revealed that 11 novice teacher participants felt only the district mentor had contributed to their growth. Only one teacher felt the campus mentor had added to their growth and development. Six novice teachers indicated that both the campus and district mentor had participated in their overall growth.

Table 9

Perceptions of Novice Teachers on Mentor Contribution to Overall Growth

<u>Contributing Mentor</u>	<u>Frequency</u>	<u>Percent</u>
Campus Mentor Only	1	4%
District Mentor Only	11	44%
Campus and District Mentor	6	24%
Neither Mentor	0	0%

Through the data provided by the district mentor, I was able to review the amount of time the district and campus mentor spent with the novice teachers, as displayed in Table 10. This data was provided for all of the 24 novice teachers in the district. Regarding the district mentor, 18 of the novice teachers had at least four meetings with the district mentor throughout the year, and almost 20 of the novice teachers spent at least two hours in total with the district mentor, where each meeting would last around 30 minutes. In total, the district mentor had 113 documented meetings with the novice teachers throughout the year, averaging six meetings per teacher. The district mentor's average time with the novice teachers was around two hours and 32 minutes.

Thirteen of the 24 novice teachers stated they had never met with their campus mentor teacher. Of those who did meet with campus mentors, seven novice teachers reported meeting at least an aggregate of 1.5 hours with their campus mentor. The campus mentors had 38 documented meetings with the novice teachers and spent, on average, less than 40 minutes total for all meetings with each novice teacher. However, the combined total for the district and campus mentor was 144 meetings, and together they met, on average, for three hours and 11 minutes with the novice teachers. This data reflecting minimal mentor interaction may provide

insight into why novice teachers indicated they would like to have more support from their campus mentor.

Table 10

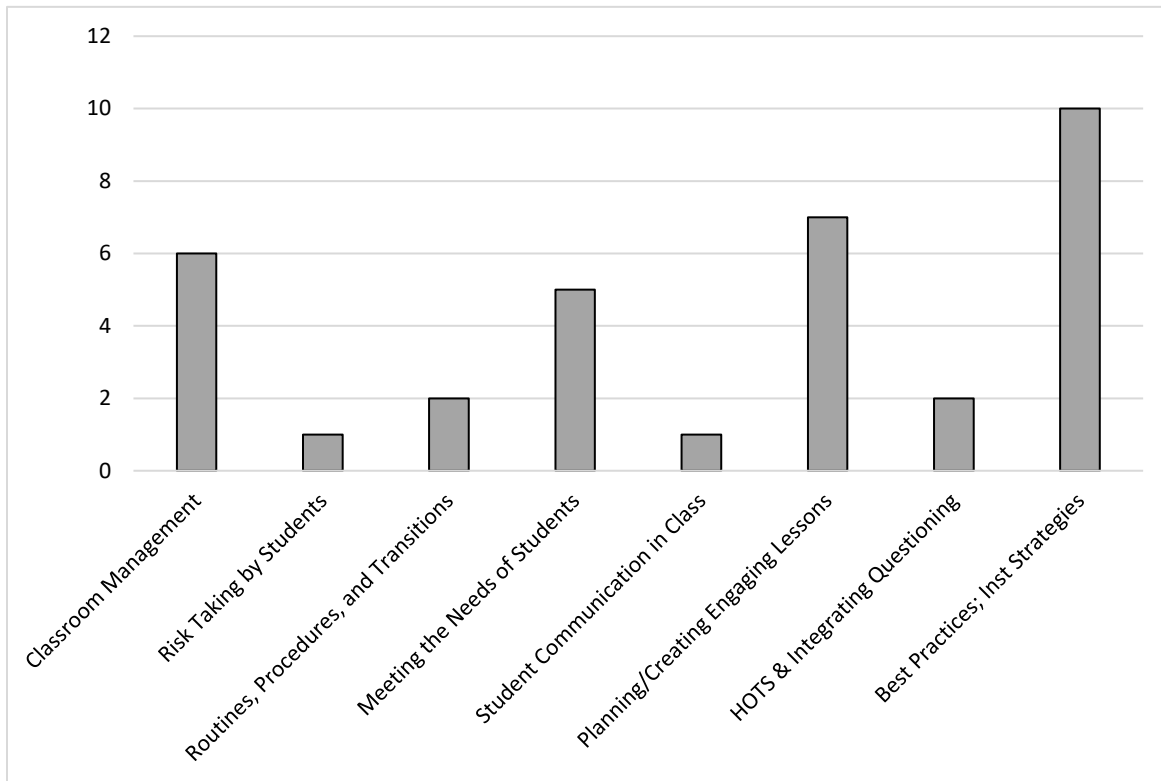
Frequency of Meetings and Amount of Time Between Novice Teacher and Campus and/or District Mentor

	Total Number of Meetings	Total Amount of Time in Hours	Average Amount of Time Spent with Novice Teachers
Campus Mentors	38	15.55	39m/teacher
District Mentor	113	61.00	2h 32m/teacher
Campus and District Mentor Combined	144	76.55	3h 11m

Based on the data collected from the district mentor coordinator about the meetings between novice teachers and campus or district mentors, specific topics related to the novice teacher’s role were discussed at each meeting (see Figure 6). Most of the meetings were follow-up meetings in response to the campus mentor teacher's observation of the novice teacher. Other meetings were check-in meetings between the district/campus mentor and novice teacher. There were eight different topics and various themes the meetings centered around, which included: classroom management, risk-taking by students, routines, and procedures, meeting the needs of students, student communication in class, planning/creating engaging lessons, higher-order thinking questions (HOTS) and integrating questioning in the lesson, and best practices or instructional strategies. During the meetings, the most frequently discussed topic was the implementation of best practices and specific instructional strategies. The two most discussed topics were planning and creating engaging lessons followed by classroom management.

Figure 6

Most Frequently Discussed Topic in Mentor/Novice Teacher Meetings



During focus groups, novice teachers were asked if they felt more confident in the classroom and, as an educator, if they felt more successful. All participants in the survey indicated that they felt more confident and more successful because they had participated in the induction mentoring program. According to the data, 17 of the participants in the program indicated that the program helped them gain the strategies needed to be successful in the classroom, specifically in classroom management and instructional strategies. When asked why they felt more confident after participating in the program, the novice teachers indicated support from the campus and/or district mentor, effective instructional strategies, and effective classroom management strategies gained. Some of the comments made by the novice teachers included:

“The program has given me great strategies to use in the classroom and has boosted my overall confidence as an educator.”

“It provided me with different tools and techniques that I can use in the classroom or continue to use in the classroom. It almost was like a validity component for things I was already doing.”

“The program helped me in understanding how students learn. I sometimes felt overwhelmed with strategies; however, I wouldn’t take those away. They were always beneficial and needed.”

“I got some good tips for classroom management.”

“Feedback and reflection were the most helpful to help me grow in my first year of teaching. I keep an open mind and am up to try other suggestions. I have gained some new teaching tools to use during my lessons from the mentors.”

At the end of the focus group interviews, novice teachers were asked what advice they would give other novice teachers entering the education profession. Several teachers stated that no matter if the novice teacher was new to Willis ISD or any other district, teachers new to the profession should have a positive attitude and growth mindset and be ok with making mistakes. Four novice teachers confirmed that everyone should be receptive to feedback and ask for help from their team, mentors, and campus administration. One teacher stated, “Lean on those who are experienced around you! They want to help and have so many great tools and experience.” Other responses included getting ahead on planning and working on building relationships with students and other staff. One novice teacher stated, “Breathe. It might be stressful at the beginning but take that breath and relax. It is going to go by fast. You may think you are doing something all wrong, but the students get it. You can see the light in their eye once they understand something. Your students are your biggest support team.” Finally, one novice teacher said, “There will be times that you will want to give up and think teaching is not for you. Kids are going to test your limits. Your students will become your family. They will start to see your teacher heart and you will form great relationships with

your kids. Don't give up and find a teacher to talk to. We have all felt at one point the way you may feel at times. Keep your head up.”

Interaction Between the Research and the Context

The study was performed during the 2020-21 school year, which was also the beginning of the COVID-related issues and many new policies for teachers. Despite the ever-evolving changes in mandates, the district continued to support novice teachers in the inaugural year of the induction and mentoring program. COVID could have impacted the number of interactions between the campus and/or district mentor and the novice teachers because of the amount of time dedicated to issues that arose out of COVID. It could have also impacted the number of interactions between novice teachers and mentors due to social distancing and mask requirements and the fear that came from the unknown of the pandemic.

There were also limitations because of convenience sampling and a small number of novice teachers within the district, the data collection process due to COVID and the time of year the data was collected, and my role as principal in the district. While there were 18 novice teacher participants, there were data collected by the district induction mentor coordinator that included information from all 24 novice teachers in the district. The novice teacher participants were sent the survey through Google Forms, and 12 of the 24 total novice teacher participants completed it within the first week. Reminders were sent, and the remaining six participants completed the survey, but six did not respond to the survey. With the 18 novice teacher participants, there may have been some hesitation in fully disclosing any issues the novice teacher participants felt or experienced while in the induction and mentoring program because I was the principal at one of the schools during the study. There were also some issues with coordinating the focus group interviews, and some participants requested they be able to respond

by phone or by Google form to the semi-structured interview questions with additional follow-up, which may have led to limited responses by the participants. The amount of participation and limited responses could also be due to the timing of the data collection point in May, when the year is nearing completion, and numerous student activities.

The concept of measuring teaching efficacy is multifaceted and challenging to gauge. I chose the short form of the Teacher Efficacy Scale as the instrument to measure teaching efficacy because it is reliable and valid in other studies (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Tschannen-Moran & Woolfolk Hoy, 2001). Using the instrument to determine teaching efficacy, the district can gain insight into various factors affecting the teacher's beliefs and their influence on student learning, including the student environmental factors (Gibson & Dembo, 1984).

The research will impact the induction and mentoring program by giving insight into educator teaching efficacy and perceptions. The program revealed it has defined strengths and weaknesses and areas for improvement through the research. The data was shared with the district mentor and assistant superintendent of curriculum and instruction. Once the data was shared, the reaction of the district mentor and the assistant superintendent was to review the support the program provided and discuss how the program could be improved. Suggestions for further study on how the district could better support novice teachers should be considered and determine which components the novice teachers believed improved their overall educator teaching efficacy. Additionally, the district should consider a study of the relationship between teaching efficacy and teacher effectiveness.

Summary

The teacher induction and mentoring program were implemented to support novice teachers and promote growth, leading to highly effective educators promoting student achievement. This research study provided novice teachers the ability to provide input on the induction and mentoring program for future improvement by understanding novice teachers' current level of teaching efficacy and the support novice teachers perceive as beneficial. Novice teacher participants' responses to quantitative measures, including surveys and demographic questionnaire information collected, did not yield statistically significant results, and no generalizations can be made. However, novice teachers provided insight through the qualitative measures on several currently implemented components of the induction and mentoring program that had value and gave input on suggested improvements and needed support for the future.

CHAPTER V

DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

District implementation of an induction and mentoring program has become an increasingly frequent way to promote growth and provide continued support to novice teachers (Desimone et al., 2002; Ingersoll & Strong, 2011; Kraft & Papay, 2014; National Commission on Teaching and America's Future, 2016; Wong, 2004). When invested in an induction and mentoring program, novice teachers positively change student performance, experience increased teaching efficacy, and benefit from improved overall teacher quality in a shorter amount of time. Through this explanatory, sequential mixed methods study, my goal was to understand the effectiveness of the Willis ISD's induction and mentoring program in its inaugural year by examining novice educators' teaching efficacy and the program's impact on pedagogical skills based on varying levels of support and variable implementation of the program's components.

This chapter summarizes the findings of this study based on data gathered from the three research questions. I aim to provide a thorough discussion of novice teacher participants' viewpoints and perspectives about the efficacy of the district's induction and mentoring program and reveal insight into the varying factors affecting novice educators' teaching efficacy, pedagogical skills, and overall success in the classroom. While the study yielded no statistically significant data, it provided valuable insight for future development of the novice teacher induction and mentoring program, provided various personal lessons, revealed implications for improved practice, and contributed to the field of study. Ultimately, I offer recommendations for the future of the novice teacher mentoring and induction program at Willis ISD.

Summary of Findings from Chapter 4

At the launch of this action research study, demographic information and educators' teaching efficacy were collected from 18 of 24 novice teachers in years 0-1 in Willis ISD. Novice teachers were first invited to complete the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990) and participate in focus group interviews using semi-structured interview questions regarding their perceptions gained from the induction and mentoring program. Using the knowledge gained from the semi-structured interviews, the goal was to determine how the district could better support novice teachers, build their teaching efficacy, and develop supports that impact pedagogical skills. Mixed methods research was applied to use the same novice teacher participants in both phases and compare the data's relationship (Creswell, 2014). I analyzed the survey submissions during the quantitative phase using simple descriptive statistics to understand the viewpoint of novice teacher participants (Creswell, 2014). This insight then guided the qualitative phase of the study.

The district's novice teacher participants completed the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990). The analysis of the mean scores revealed two main categories into which the novice teachers could be sorted: those who reported low perceptions of teaching efficacy and those who reported high perceptions of teaching efficacy. Novice teacher responses were further analyzed based on the general teaching efficacy (GTE) and personal teaching efficacy subscales (PTE). The results from the Teacher Efficacy Scale Survey (Woolfolk & Hoy, 1990) were compared with the results of the 12 self-reported demographic questions. Since the total number of novice teachers participating in the survey was so small, the information yielded no statistically significant results but did offer valuable information for suggestions for future improvement of the novice teacher induction and mentoring program.

In this study, eight of the 18 novice teacher participants self-reported high teaching efficacy. Of the eight novice teacher participants with high teaching efficacy, seven were alternatively certified. In reviewing ages and GTE, I found the highest GTE mean scores related to teaching efficacy were in the 31-35 (4.15) and 36-40 (4.32) age groups. As the district looks at the level of support and areas for the following year, it is helpful to know those that feel their influence does matter even though there are outside factors that impact students' learning.

During the 2020-2021 inaugural year of the induction and mentoring program at Willis ISD, eight of the 18 novice educators showed high teaching efficacy measures. The following 2021-22 school year, six of the 18 novice teacher participants had left the district, and one had moved into a non-teaching position. Of those from the inaugural year who remained in teaching positions in the district, 10 of the novice educators with low teaching efficacy and one novice educator with high teaching efficacy remained in the district during the following 2021-22 school year. Only five of the low-efficacy novice teachers remained on the same campuses the following school year, and even those who remained on their original campuses were not assigned the same teaching position. Retaining novice teachers at a campus for more than one year is essential because the cost of the rising attrition rate at the campus level increases as teachers decide to leave campuses or the district (Smith & Ingersoll, 2004). The campuses with the greatest number of educators reporting high teaching efficacy were the junior high and high schools, which include grades 7-12. The majority of the novice educators reporting low teaching efficacy were employed at the primary, intermediate, and middle school campuses. Question two on the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990) related to GTE stated, "If students aren't disciplined at home, they aren't likely to accept any discipline." The data from the survey revealed the lowest mean score for all campuses except the junior high. On question

2, the junior high campus had the highest GTE mean score of 4.72 compared to the high school mean, with a GTE mean score of 3.0 and intermediate of 3.2. The literature states that novice teachers will struggle with classroom management unless supported by a successful program with campus mentors (Ingersoll & Strong, 2011). The GTE mean scores calculated from responses to question 2 support the literature; significant research demonstrates novice teachers' success is determined by the level of support which includes support with classroom management (Flower, McKenna, & Haring, 2017). Conversely, novice teachers on campuses with higher GTE mean scores were the campuses on which the mentors were more involved with the novice teachers. As shown by the information reported from novice teachers in this study, lack of campus mentor support was one of the areas for improvement.

Apart from junior high, the lower GTE score could also be related to turnover in the campus administration. During the 2020-2021 school year, most campuses had a change in campus administration. All campuses except for the junior high had a new assistant principal. In addition, the intermediate and middle schools gained a new building principal and assistant principal. As stated in the literature review in chapter two, the two items novice teachers listed as essential were the use of mentors within a robust mentor program and supportive and involved school administration (Ronfeldt & McQueen, 2017). New administrators on each campus likely found it challenging to build supportive relationships in addition to the demands of their new roles.

When reviewing the results of the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990), the greatest differences in mean values emerged between items 1, 4, and 10. Items 1, 4, and 10 measure general teaching efficacy, defined as the educator's belief in influencing student learning despite students' environmental factors (Gibson & Dembo, 1984). Because Willis ISD

has a significant number of students identified as low SES, this information could help plan future supports to address the variations in the mean regarding student environmental factors and the teachers' beliefs that they can affect student outcomes by increasing support in areas novice teachers felt had the greatest impact.

In reviewing the qualitative data gathered from the novice teachers through focus groups and the data shared by the district induction and mentoring coordinator, novice teachers shared how they felt about teaching. Before the start of school, half of the novice teachers reported they were excited about beginning the induction and mentoring program. One teacher even mentioned the program was why she accepted the position at Willis ISD. However, in May of the 2020-21 school year, three novice teacher participants had not completed their requirements for the alternative certification program. They felt the mentoring program for Willis ISD was one more thing they were required to do. As revealed by the novice teacher responses, it is problematic to have teachers working on their certification while teaching because this is basically a paid internship that requires far more effort than a traditional internship. These teachers were not yet fully certified and were teaching during the ever-changing landscape of the global COVID-19 pandemic while also balancing classwork, completing their certification program, meeting the requirements of the induction and mentoring program, and fulfilling the day-to-day requirements of teaching. One suggestion for improvement would be for the district to hire individuals who have already completed their alternative certification programs to alleviate the perceived extra burden. This is important because the traditionally certified teacher has had time to acclimate to the role and responsibilities of the profession and is more likely to identify in the educational role as those who are alternatively certified because they inserted themselves in the educator role quickly and are less likely to identify as an educator. Another suggestion would be for the district

to replace some of the induction and mentoring program requirements with those activities already mandated by the alternative certification programs' requirements.

Analysis of the data from this study revealed two factors novice teachers found to be the most challenging throughout the school year. Seven of the 18 participants reported classroom management as their biggest challenge, while six of the 18 reported COVID-related factors as their most significant challenges. Despite being able to readily identify challenges, the novice teachers indicated that they felt the induction and mentoring program was supporting them., In fact, the novice teachers felt they could adjust to the challenges they were experiencing, including COVID and classroom management, with the district mentor's help. The novice teachers identified receiving this support in various ways, including collaborating with their peers or team, interacting with campus administration, and receiving acknowledgment and recognition in their roles as an educator.

When asked how they could be better supported in the future, there were four areas that novice teachers established as being the most important. The areas of support novice teachers felt were significant included increased resources and planning support, time with campus and/or district mentors, opportunities for peer modeling with observations and feedback, and more time and support from the campus mentor. A prevailing theme throughout the study responses was the lack of support novice teachers received from their campus mentors. Campus mentor support is suggested as an area of focus for future improvement.

There were different components the induction and mentoring program offered novice teachers, including the support of the district mentor, campus mentor, professional development, time to meet and plan with their team, feedback form the campus instructional coach, observations from campus or district mentor followed by feedback, new teacher modules, and

monthly novice teacher meetings. Novice teachers were asked to assess the various elements of the induction and mentoring program and rate whether each was most beneficial or least beneficial. The most beneficial components of the program included the district mentor, feedback from the campus instructional coach, and meeting and planning with a team of teachers. The least beneficial included the monthly meetings, new teacher modules, and the campus mentor. As mentioned previously, the campus mentors may be perceived as the least beneficial because 13 novice teacher participants did not meet with their campus mentors during the course of the year. Furthermore, for those who did meet with their campus mentors, the average documented time was less than 40 minutes for the entire year.

Overall, 11 of the 18 novice teachers indicated that they felt the district mentor program led to positive growth, and six of the 18 believed it was the combination of efforts from the district and campus mentor that led to positive growth. The overall perspective of the novice teacher and mentor program was positive, and all participants reported feeling more confident and more successful based on the components and the individuals associated with the induction and mentoring program. The novice teachers all reported that they could build on their knowledge and pedagogical skills because of their campus mentor and/or the district mentor. Most of the novice teacher participants reported growth in effective instructional strategies and practical classroom management strategies.

To evaluate and understand how to better support novice teachers through the induction and mentoring process, the study focused on the following research questions:

Research Question 1. Were there any statistically significant differences in the reported teaching efficacy based on demographic factors? Were there any statistically significant differences in the reported general teaching efficacy based on demographic factors? Were

there any statistically significant differences in the reported personal teaching efficacy based on demographic factors?

Research Question 2. Were there any statistically significant differences in the reported teaching efficacy (general or personal) attributed to the path of teacher certification?

Research Question 3. Were there any elements of the induction and mentoring program that novice teachers believe impacted their pedagogical skills and teaching efficacy?

Discussion of the Results in Relation to the Extant Literature or Theories

This research intended to determine the effectiveness of the induction and mentoring program in Willis ISD and offer novice teachers an opportunity to provide their unique perspectives on their teaching efficacy and current novice teacher support supplied by the district. The 2020-2021 school year was the inaugural year for implementing an induction and mentoring program for Willis ISD. While the Texas Education Agency (TEA) did not mandate districts implement novice teacher support, they provided guidelines for districts to receive funding through the Mentor Program Allotment Rule (TEA, 2020). Willis ISD met the requirements of the Mentor Program Allotment Rule (TEA, 2020) and opted to provide additional induction supports beyond those required by TEA. The district's purpose in implementing both a mentoring and induction program was to improve teacher skills in the classroom and build a more positive work environment to retain high-quality teachers.

Information gathered from the demographic questionnaire of novice teacher participants in Willis ISD included the employment status of the novice teachers during the following 2021-2022 school year. According to Ingersoll (2003), about half of the novice educators are inclined to leave the education profession within the first years of teaching. From the data, I found six of the 18 novice teacher participants left the district after only one year in Willis ISD. There were

eight novice teachers at the middle and high school who left the district and eight novice teachers who remained at their campuses. Of these who remained at the campuses and left the district, there were an equal number with high and low teaching efficacy. The primary saw the lowest attrition, losing only three. This statistic is consistent with the literature from Smith and Ingersoll (2004) who reported twice as many middle school novice teachers are likely to leave as those at the elementary school level. The literature states that a mitigating factor in teacher turnover could be provided through induction supports to novice educators throughout the first year of teaching to reduce the number of teachers who will move out of the district or leave the district (Smith & Ingersoll, 2004; Ingersoll & Strong, 2012; Ronfeldt and McQueen, 2017).

While there was no statistically significant quantitative data to support a connection between induction and mentoring program, novice teachers, and teaching efficacy, the literature shows that teaching efficacy plays a significant role in an educators' belief in their abilities, which is formed during the first few years of teaching (Linek et al., 2012). Several areas have a positive correlation with teacher efficacy, including inspiring student effort (Midgley, Feldlaufer, & Eccles, 1989), teachers' enthusiasm for their work including finding new instructional methods (Allinder, 1994), and belief they can impact student achievement (Gibson & Dembo, 1984).

The results of the qualitative phase revealed data related to the novice teacher's perceptions of support and current components provided by the induction and mentoring program. According to the literature, a few elements of quality induction and mentoring program include a time frame of 6-12 months, opportunities to evaluate students' and the teacher's performance continually, and the ability to observe other teachers in practice and receive constructive feedback. (Darling-Hammond & Richardson, 2009). Two other components that

add value to the induction and mentoring are collaborating with their mentors to build teacher capacity (Ingersoll & Strong, 2011) and supportive and involved school administration (Ronfeldt & McQueen, 2017). Comparison between the literature and the results of this study demonstrate a distinct parallel. Willis ISD's mentor and induction program met best practice guidelines outlined in the literature by spanning a minimum of 6-12 months (Darling-Hammond & Richardson, 2009), providing support from campus administration (Ronfeldt & McQueen, 2017), and providing supportive district mentors to encourage communication and feedback that allows for growth (Ingersoll & Strong, 2011).

Novice teacher participants in the study suggested ways the district can better support and build the teaching efficacy of novice educators. The areas defined by novice teacher participants in this study align with the previously described literature about mentors and the induction program design. The top four areas perceived as being the most significant to support novice teachers in the future included more resources and planning supports; time with campus and/or district mentors; opportunities for peer modeling, observations, and feedback; and more time and support from the campus mentor.

Overall, both the literature and the qualitative data gathered in this study determined the most critical element of the induction program to enhance novice teachers' development is creating and maintaining an effective mentoring program (Ingersoll & Strong, 2012). Mentors must devote time to meeting and collaborating with novice teachers (Villani, 2009). To this point, the novice teachers in Willis ISD consistently stated the district mentor coordinator, who provided over 113 meetings with the district's novice teachers with an average time of three hours per meeting, was the most valuable component of the program. Furthermore, campus mentors were rated as a low-value component of Willis ISD's program, with, 13 of the 24 novice

teacher participants in the study indicating they had never met with their campus mentor teacher. Considering mentoring is the one component that has the most significant impact, mentor meetings must be actively facilitated, as they will directly affect the overall results of the induction program (Ingersoll & Strong, 2012).

Discussion of Personal Lessons Learned

One of the most important lessons learned from the study was understanding how important it is to invest in all teachers- including novice teachers. I never fully realized the impact a teacher's efficacy alone has in his or her classroom and the resulting need for high-quality instruction until I began the research process and spent time reflecting on the responses of novice teachers in the quantitative and qualitative phases. By exploring the literature, I was able to solidify my understanding of how the induction and mentoring program creates an underpinning for developing the high-quality teachers districts seek.

The concept of teaching efficacy has changed my perspective on how we measure the impact of the teacher. It is not enough that we give novice teachers the training program to create the foundation for building high-quality instruction. We must also develop the teacher's belief they have an impact that exceeds a student's environmental factors including motivation. Since teaching efficacy is formed in the first few years of teaching (Linek et al., 2012), we must create a support system of administrators, support staff, mentors, and teachers that model a strong commitment and enthusiasm for the students in their classrooms and the education profession as a whole.

I have also learned that quality programs require time for contemplation, development, implementation, and reflection. If the most significant factor in student success is teacher quality, we cannot plan and implement programs haphazardly. We see constant change with new

initiatives and a push for policies and programs every year in education. Before teachers and administrators firmly understand how a program should be implemented and what it means, they must adjust to new initiatives. With the knowledge gained from the research, I have observed firsthand how important it is to reflect on our current practices and how we should intentionally plan and continually polish a program through an evaluation process that values action research. Programs should be based on research proving a program is worth the investment it demands. Districts must base their decisions on actual data and then make improvements and adjustments so the program performs to best meet the district's needs.

Finally, I learned that we often overlook novice teachers' struggles during their first few years of teaching. Novice teachers are expected to be as knowledgeable and have the same pedagogical strategies as their peers who have been teaching for many years. It is unrealistic for novice teachers to possess the same pedagogical and classroom management skills as veteran teachers (Feiman-Nemser, 2001). Supports such as the induction and mentoring programs must be in place the first day the novice teacher arrives on the campus to successfully foster the pedagogical and classroom management skills needed to succeed. Districts will be better equipped to recruit and retain qualified applicants when they can offer the necessary support to build each recruit's teaching capacity. To this end, induction and mentoring programs must support the varying requirements of novice teachers in areas including student behavior, development of units and lessons, and utilizing engaging strategies for students (Ingersoll & Strong, 2011; 2012). The support provided by the district must include knowledge about the student population they will be serving and how to meet their specific needs. Without these supports, novice teachers may become another statistic in the ever-increasing novice teacher attrition rate.

Implications for Practice

The data collected and analyzed for this action research study was beneficial in understanding the influence of the induction and mentoring program on novice teachers in Willis ISD. While there was no statistically significant data gained from the Teacher Efficacy Scale survey (Woolfolk & Hoy, 1990), information from both the quantitative and qualitative phases could help inform the district about considerations for future decisions related to the induction mentoring program. Through the research, novice teachers were able to share their perspectives and identify areas novice teachers perceived as supportive.

The district will need to continue to support the induction and mentoring program and refine the practices based on an ongoing collection of data in subsequent years. Support for novice teachers should come from all district personnel including district administration, the district mentor coordinator, campus administration, instructional coaches, peer teachers, and the assigned campus mentors. Based on the responses from novice teachers, campus-level support including campus administration will be instrumental in developing the program. Campus administrators should consider how they can facilitate novice teachers' observation of effective instructional practices, time for collaboration with mentors, and ensure campus administrators continually provide feedback to novice teachers. Furthermore, common scheduling between departments and mentors should be considered for collaboration purposes. These factors are essential for novice teachers because they prioritize collaborative time for the novice teacher to plan engaging lessons, discuss their instructional and resource needs, and voice any concerns they have with other campus staff.

In the future, campus mentors who are prepared and willing participants should be solicited. Most novice teacher participants in the study reported they did not feel supported by

their campus mentor. Considering the mentoring process is the primary element of the induction program that has the most significant impact, it should be carefully examined (Ingersoll & Strong, 2012). Furthermore, the selection of the mentor is critical for the development of the relationship between the mentor and novice teacher. Campus mentors should be limited to teachers in the same department and experienced in the same content area.

Implications for Context. During the first year of the induction and mentoring program, the study reported positive effects on novice teacher perceptions, including how novice teachers viewed the process of solving problems in education through action research. Novice teacher participants were exposed to action research and began to understand how decisions in a district should be based on an evaluation process. Since novice educators did not understand the educational concept of teaching efficacy and how it applied in the context of novice teachers, they asked questions before participating in the study, which promoted their awareness of the research process. The interactions between the researcher and the novice teachers also encouraged reflection on how novice teachers' beliefs affect their teaching and students based on teaching efficacy. Overall, the novice teacher participants felt the program would see future improvements based on their input during the action research process.

The induction and mentoring coordinator for the program was valuable in obtaining the data used during the qualitative phase of the study. In addition, the interactions between myself and the induction and mentor coordinator encouraged open dialogue about the induction and mentoring program. The coordinator reached out to me often to understand different literature and how it supported the induction and mentoring program as she discussed the program with other district leaders. The coordinator also wanted to understand if the program components implemented in the 2020-2021 school year were research-based. Other conversations centered

around how teaching efficacy plays a vital role in novice teacher development. Overall, the action research study encouraged additional conversation between the district coordinator and myself, a campus principal. The study allowed for collaboration between district leaders to improve the program and make the most gains in teacher quality and student improvement. With the open dialogue and action research-based conversation, I am hopeful for the continued development of the mentoring and induction program and support for continued action research in the district.

Finally, I believe this action research provides the district with a clear picture of novice teacher attrition and has led to conversations about the supports and components of the induction and mentoring program. Although the study did not seek to identify the attrition of novice teachers, the study collected data that should be of interest to the district. For more than five years, the district has experienced a 20% attrition rate for all teachers (TEA, 2019d), and, based on the data collected in this study, this rate is much higher for novice teachers. The attrition rate for the inaugural year of the induction and mentoring program in Willis ISD was close to 40%. It is unknown if factors such as COVID may have contributed to the large percentage of novice teachers who left the district. However, the data should still be a point of reflection and consideration when creating and defining the different supports for novice teachers. As the district improves and develops the induction and mentoring program, the hope is that novice teacher attrition will be reduced.

Implications for Field of Study. As a school administrator, I have observed firsthand how action research is a value-added component in helping districts address issues related to teaching and learning. With this action research study, I was able to contribute to the current field of curriculum and instruction, specifically in the area of novice teacher development,

through an induction and mentoring program. As I undertook this study, I was also able to model how action research can offer insight into current programs and policies; as a result, other district staff, teachers, campus administrators, and district administration had an opportunity to gain perspective on the values of action research. It is not common for schools to take an in-depth look at programs through action research, but the importance and information gathered from the research should not be overlooked and action research should continue to be implemented in the future.

Although the data collected in the explanatory, sequential mixed-methods study was not statistically significant, nor could it be used for generalization in the field, the action research study yielded a model for how an induction and mentoring program involving teacher participants could be structured. This information can also help serve the field by highlighting the importance of collecting and extrapolating quantitative and qualitative data to add richness to the narrative of a study. Other professionals in the education field seek guidance on conducting action research relevant and useful to their districts' needs. By contributing to the field of study, I have provided information that can be of use to other school district professionals.

Recommendations

I recommend others pursue future research involving novice teacher perceptions in an induction and mentoring program by creating a mixed-methods study that includes research into novice teachers' teaching efficacy and their mentors' teaching efficacy. In this study, only data on novice teaching efficacy was gathered. By surveying both novice and mentor teachers, the results can be compared to determine whether there exists any connection between the mentor teaching efficacy and novice teaching efficacy. In this study, the measure of the novice educators' teaching efficacy was not statistically significant, but the study did offer insight into

the importance of novice teacher perceptions and the impact they can have on the teacher's effectiveness in the classroom. Creating a study with novice teachers and mentor teachers could potentially increase sample size and the ability to yield statistically significant data, thereby strengthening future studies.

I recommend a longitudinal action research study for the continued evaluation of induction and mentoring programs to determine the effectiveness of the different supports and components provided to novice teachers. By evaluating the components and supports, the district will continue to gather data guiding the novice teacher induction and mentoring program development. Novice teachers offered suggestions in the study on the support they were currently receiving and recommendations for future induction supports. The program would benefit from understanding novice teachers' perceptions of beneficial support and the induction and mentoring component that provided the support. For example, this could help the district understand the novice teachers' reported growth in effective instructional and classroom management strategies. While novice teachers considered classroom management as an area in which they had grown, seven of the 18 felt it was an area that was also the most challenging and in which they needed additional support in the future. Further research is recommended to determine the source of the various supports and components most effective and valuable to the program.

Additionally, the novice teacher responses regarding their campus mentor teacher and the lack of participation should be monitored and studied. Thirteen of the 24 novice teachers reported a lack of involvement from the campus mentor. Considering mentor support was the most desired component, I recommend additional research on the mentoring component of the induction and mentoring program. This data could be collected through the observations of the

induction and mentoring coordinator, the novice teacher input, and self-reports from the campus mentor. As stated previously, the mentor is the component with the most significant impact (Ingersoll & Strong, 2012). Further studies of the mentoring component should involve the mentor selection process, qualifications, time spent with the mentee, feedback/observation process, and monitoring of novice teacher needs.

Closing Thoughts

The purpose of this action research study on novice teaching efficacy and induction and mentoring program was to better understand novice educators' teaching efficacy better and how it can impact pedagogical skills based on varying levels of support and components implemented. A large body of research supports the implementation of induction and mentoring program with defined components to assist and encourage novice educators, so they do not become discouraged or overwhelmed. The district's purpose in developing the program was to promote teacher quality by coaching novice teachers on pedagogical skills, including instructional and classroom management skills as well as address the growing attrition rate of novice teachers. Research exists about how creating ongoing positive classroom experiences for novice teachers is more likely to develop high teaching efficacy and encourages novice educators to remain with the district.

Novice teachers began the school year with a two-day new teacher orientation where they met with their campus mentor. The expectation of the campus mentors was to observe novice teachers at least once every grading period and meet with them at least one time per month, followed by a meeting where mentors would coach and provide feedback to the novice teacher. The district mentor coordinator offered novice teachers similar support as the campus mentors. The process developed and the activities offered through the induction and mentoring program

were offered to novice teachers with different pedagogical skills and experiences so they could readily use them in the classroom.

In the study, novice teachers expressed they felt supported by the district mentor coordinator, but not all the novice teachers felt supported by their campus mentor. The novice teachers' responses regarding their mentor could be because over half of the novice teachers had never met with their campus mentor. Additionally, the novice teachers stated they felt classroom management and the COVID pandemic were the two most significant challenges. Despite the challenges, the novice teachers appreciated the support of the district mentor and the strategies gained during their coaching sessions. An important effect of the interactions among the district mentor coordinator and novice teachers was the positive relationship they established through ongoing dialogue during the observation and feedback process.

This action research study offered insight into the varying elements of the program and the novice teachers' perceptions of the effectiveness of the components. An essential element of the study was allowing novice teachers' input on a program developed specifically to assist them and identifying the benefits and concerns of the program with firsthand knowledge. The research collected from the novice teachers will provide input for future decisions and develop the induction and mentoring program. The study can also offer insight to other education professionals who want to implement an induction and mentoring program, including the benefits of the program from this study and areas for special attention or focus. The hope is that this research will help inform other districts of potential pitfalls when implementing a similar program so that they may proactively define steps to avoid such issues.

Increasing the support for novice teachers can lead to improvement in teacher quality. The literature demonstrates that it is crucial to push for improved teacher quality during the first

three years (Darling-Hammond, 2009; Feiman-Nemser, Schwill, Carver, & Yusko, 1999). If districts can implement an effective induction and mentoring program with supportive campus mentors, novice teachers have the potential for positive experiences leading to higher teaching efficacy (Hoy & Spero, 2005). This study's research supported current literature defining the induction and mentoring program components and the novice teachers' perceptions of components identified as beneficial in developing their pedagogical skills. In Willis ISD, the district administration found the study useful for future improvements of the induction and mentoring program. After the study of the program, the district also realized the need to create and maintain a process that evaluates the induction and mentoring program and its components for continual reflection and improvement.

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APPENDIX I

Teacher Efficacy Scale (Short Form)*

A number of statements about organizations, people, and teaching are presented below. The purpose is to gather information regarding the actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested only in your frank opinions. Your responses will remain confidential.

INSTRUCTIONS: Please indicate your personal opinion about each statement by circling the appropriate response at the right of each statement.

KEY: 1=Strongly Agree 2=Moderately Agree 3=Agree slightly more than disagree
4=Disagree slightly more than agree 5=Moderately Disagree 6=Strongly Disagree

1. The amount a student can learn is primarily related to family background.	1	2	3	4	5	6
2. If students aren't disciplined at home, they aren't likely to accept any discipline.	1	2	3	4	5	6
3. When I really try, I can get through to most difficult students.	1	2	3	4	5	6
4. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.	1	2	3	4	5	6
5. If parents would do more for their children, I could do more.	1	2	3	4	5	6
6. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	1	2	3	4	5	6
7. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	1	2	3	4	5	6
8. If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	1	2	3	4	5	6
9. If I really try hard, I can get through to even the most difficult or unmotivated students.	1	2	3	4	5	6
10. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.	1	2	3	4	5	6

*In Hoy, W.K. & Woolfolk, A.E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal* 93, 356-372.

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