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From the Beginning: A Start to End Analysis of a Beginning Teacher Program

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FROM THE BEGINNING: A START TO END ANALYSIS OF A BEGINNING
TEACHER PROGRAM

By
Andrea M. Anderson

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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2019

Approval Page

This dissertation was submitted by Andrea M. Anderson under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

FROM THE BEGINNING: A START TO END ANALYSIS OF A BEGINNING TEACHER PROGRAM. Anderson, Andrea M., 2019: Dissertation, Gardner-Webb University.

This mixed-methods study evaluated the effectiveness of a Beginning Teacher Support Program in the southern region of a school district. The effects of teacher turnover, national teacher shortages, induction programs, mentoring, administrative support, professional development, and other support offered to beginning teachers were analyzed. The researcher created a survey that was administered to high school beginning teachers, mentor teachers, and principals. A focus group and an interview with a regional beginning teacher coordinator were also conducted to further evaluate the effectiveness of the district's beginning teacher program. The results of the study concluded that beginning teachers benefitted from participating in the district's beginning teacher support program. Specifically, beginning teachers reported having a veteran mentor, having mentor teachers provide resources, and collaborating with other teachers as an area of effectiveness. Areas that were not effective included co-teaching with mentors, lesson unit planning, data analysis, and outside professional development. The researcher's recommendations for further study included providing focus groups for beginning teachers to reflect on the beginning teacher support program, future researchers should be cognizant of time management in terms of collecting data, and a more in-depth study of the role of the site-wide beginning teacher coordinator. Recommendations for the district included to continue with the pairing of veteran teachers or mentors with beginning teachers, recruit more mentor teachers to assist beginning teachers, provide more support for lateral entry teachers, and to match lateral entry veteran teachers with

lateral entry beginning teachers.

Keywords: beginning teacher support/teacher attrition/national teacher shortage/induction programs/mentoring/teacher retention

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Chapter 1: Introduction

Teachers are a relatively large occupation group, representing 4% of the civil workforce (Ingersoll, 2001). As reported by Ingersoll (2001), there were more than twice as many kindergarten to 12th-grade teachers than registered nurses, and five times as many teachers as lawyers or professors (Ingersoll, 2001). Data from the School and Staffing Survey) and the National Center for Education Statistics (NCES) show the demand for teachers has increased since the mid-1980s (Ingersoll, 2001). Since 1984, the size of the teaching workforce has consistently increased, although the rate of increase showed a slight decline in the late 1990s (Ingersoll, 2001). More recently, the teaching field was projected to produce numerous job opportunities. Vilorio (2016) projected nearly 1.9 million job openings for preschool through high school teachers between 2014 and 2024.

The demand for teachers has been characterized as a function of changes in student enrollment, changes in the teacher-pupil ratio in schools, and high levels of teacher attrition (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). The demand for teachers increased after the Great Recession and leveled off with approximately 260,000 teachers being hired annually by 2014 (Sutcher et al., 2016). One projection for the 2017-2018 school year suggested the annual hiring of teachers would approximate 300,000 (Sutcher et al., 2016).

While the number of teachers entering the profession has steadily increased, so has the amount of teacher turnover. Novice teachers represent the largest portion of the teacher turnover statistic (Graziano, 2005). Every year, schools in the United States hire more than 200,000 new teachers for the start of the school year, yet 30% of new teachers leave the profession after 3 years and more than 45% leave after their fifth year

(Graziano, 2005); however, a federal study concluded that a much smaller percentage of beginning teachers (BTs) leave the profession as once reported, citing only 17% of new teachers leaving the profession within the first 5 years of teaching. This longitudinal study found that 10% of new teachers during the 2007-2008 school year did not return the following year. Further, this percentage increased to 12% after year three, 15% after year four, and 17% after the fifth year (Fensterwald, 2015).

Statement of the Problem

According to the National Commission on Teaching and America's Future (NCTAF, 2003), the inability of schools to support highly qualified teachers is not due to the number of teachers entering the profession but rather too many leaving the profession for other jobs. In fact, data reported by the Office of Superintendent of Public Instruction (OSPI, 2014) suggest that the demand for new teachers is largely due to teacher turnover. To address the educator supply deficits, legislators mistakenly adopt lower standards for entry into the teaching field (NCATF, 2003). These lower standards include bypassing teacher preparation program requirements, state laws, and district policies for incoming teachers (NCATF, 2003). Consequently, the retention of teachers is the greatest problem facing schools today (OSPI, 2014).

BTs are no exception to the teacher turnover statistic. During the 2011-2012 school year, BTs made up 9% of the total teaching workforce in public schools nationally and 19.5% of the total teaching workforce in private schools nationally (NCES, 2006). OSPI (2014) noted that BTs working in low socioeconomic districts are typically underprepared and not supported as they confront working with lower levels of resources, poorer working conditions, and working with students and parents with a variety of needs. Further, BTs are more vulnerable to these conditions because they have a greater

likelihood to be assigned low-performing students. BTs are also less likely to receive professional support, feedback, or demonstration of what it takes to help students succeed (OSPI, 2014). According to OSPI, BTs are the most at risk of leaving the teaching profession. Additionally, Ingersoll (2001) pointed out that some factors regarding the difficulty of retaining novice teachers included low teacher pay rates, overcrowded classrooms, and outdated textbooks. These attrition rates among BTs have resulted in a revolving door of classroom teachers and students constantly being exposed to instructional disruptions. Also, schools face higher economic costs associated with continually hiring and training new teachers (OSPI, 2014).

The United States cannot achieve quality teaching and students cannot obtain a quality education if qualified teachers are not in the classroom (NCATF, 2003). To retain teachers in the classroom, school systems must develop a process for qualified BTs to collaborate with colleagues and establish strong professional learning communities (NCATF, 2003). “Good teaching and good schools are mutually reinforcing. If we want quality teaching for every child, every school must become a place where teaching and learning thrive” (NCATF, 2003, p. 7).

The State Board of Education (SBE) requires that teachers with less than 3 years of teaching experience participate in the state’s beginning teacher support program (BTSP). This BTSP consists of a formal orientation, mentor support program, and an evaluation process (Reeder, 2013). While the state requires these specific components, each school district is given the autonomy to decide how its support program will operate (Reeder, 2013).

Utilizing this autonomy, Central County initiated a BTSP to help reduce teacher attrition within the district. During the 2015-2016 school year, the state where this study

took place had approximately 16,816 BTs. Of the total number of BTs in Central County, 2,252 left the profession. This fact contributes to this state's BT turnover rate, surpassing the national average of 33% for teachers with 0-3 years of teaching experience (Corbell, 2009). Further, this state spends, on average, \$12,500 to replace each new teacher. During the 2007-2008 school year, the state spent approximately \$37 million on teacher turnover alone (Corbell, 2009).

Purpose of the Study

The purpose of this research study was to evaluate the effectiveness of the existing BTSP in the southern region of Central County. This evaluation utilized a mixed-methods approach to analyze both quantitative and qualitative data. Recommendations for areas of improvement to the program were provided.

Evaluating the BTSP in Central County was significant because it could assist in determining if the BTSP has met the needs of the BTs in the district. Meeting the needs of the BTs in Central County could result in improved teacher turnover overall. Likewise, the results of the study provided recommendations to essential stakeholders to help better meet the needs of BTs.

Setting

The BTSP of Central County was utilized to provide BTs with assistance in acclimating to the teaching profession. Central County school district was one of the largest school districts in the state and ranked in the top 20 school districts in the nation. The average daily enrollment in this district during the 2015-2016 school year was 157,180 students. Table 1 reflects the demographics of the Central County school district enrollment.

Table 1

Central District Student Body (%)

Demographic	Percentage
Male	51
Female	49
Caucasian	48
African-American	23.8
Hispanic	16.7
Asian	7.6
Mixed Race	3.7
American Indian	.02
Native American/Pacific Islander	.01

As depicted in Table 1, the Central County school district student body was split by gender with 51% male students and 49% female students. In addition, the district served a diverse student population with approximately 48% of the student body being Caucasian, 23.8% African-American, 16.9% Hispanic, 7.6% Asian, 3.7% of mixed race, 0.02% American Indian, and 0.01% Native Hawaiian or Pacific Islander. Central County was home to 177 schools: 110 elementary schools, 34 middle schools, 26 high schools, and four alternative schools. Approximately 50% of educators in Central County school district had advanced degrees, with over 1,000 educators being National Board certified teachers. Further, an estimated 50,000 students qualified for the district's free and reduced lunch program, and the special education program served almost 21,000.

BTSP

Before the start of a school year, BTs in Central County school district participated in the BTSP preliminary meetings. The BTSP was a required 3-year program for BTs. One primary goal of the program was to help new teachers improve skills and become successful educators. Other goals of the BTSP were to ensure that BTs meet the state's professional teaching standards, impact the learning of all students in distinguished ways, and chose to remain in the profession and become future masters of

the profession, teacher leaders, skilled administrators, and superintendents.

As part of the program, BTs were provided various supports: help with lesson planning and classroom management, new teacher orientation, a veteran mentor, and other professional development. In addition, all BTs attended orientation within 2 weeks of their first day of work for the upcoming school year. At orientation, all BTs received an overview of the district goals, school goals for their respective schools, policies, procedures, a description of available services, and training opportunities. BTs also received information regarding the process for achieving a continuing license, the state Teacher Evaluation Process, the North Carolina Standard Course of Study, local curriculum guides, and the safe and appropriate seclusion and restraint of students. The SBE's Mission and Goals, provided for all BTs as part of the BTSP, included specific goals.

To ensure that BTs had the opportunity to develop into capable teachers, the district required certain working conditions be followed. Mentors were required to be assigned early and be in close proximity to the mentees. BTs should have had a limited number of preparations; limited noninstructional duties, a limited number of exceptional or difficult students, and no extracurricular assignments unless requested in writing by the BT.

Each school year, every BT was assigned a mentor. The process for assigning a mentor varied by school and was based on the number of mentors available and the number of BTs assigned to each school. To be considered as a mentor in Central County, veteran teachers must have received "accomplished" on the North Carolina Educator Effectiveness System (NCEES). Also, mentors must have met expectations for student growth.

Each year, BTs were required to develop a Professional Development Plan (PDP) with the principal and mentor teacher. This plan was to be based on the state Professional Teaching Standards and must include goals, strategies, and assessment of the BT's progress in improving professional skills. At the beginning, middle, and end of each year, formal conferences between the BT, mentor, and principal were required to reflect on the progress of the BT in meeting the goals established for professional growth.

Lateral entry teachers were also included in the BTSP. To qualify for lateral entry in the state where this study was conducted, an applicant must have earned a relevant bachelor's degree from a regionally accepted college or university, completed 24 semester hours of coursework in the teaching area, or received a passing score on the North Carolina SBE approved licensure exams for the teaching area. In addition to these requirements, candidates must have earned a 2.5 GPA, completed 5 years of experience considered relevant by the employing LEA, earned passing scores on Core Academic Skills for Educators, or a total SAT score of 1100 on tests taken prior to March 2016. If the ACT was taken, the candidate must have earned a score of 24 and a GPA of 3.0 in the major field of study, a GPA of 3.0 in all senior year courses, or a GPA of 3.0 in a minimum of 15 semester hours of courses completed within the last 5 years after the bachelor's degree.

Research Questions

The following research questions guided this study:

1. What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview?
2. What is the impact of the BT program as measured by the teacher attrition rate

for BTs?

3. How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and the BT coordinator interview?

Professional Significance of the Study

Central County school district had a mandated BT program for all teachers with less than 4 years of teaching experience in the district. While student enrollment and the creation of new schools were steadily increasing in the district, the teacher turnover rate had also increased. Table 2 illustrates the attrition rates from 2013-2016 in the state where this study took place.

Table 2

State Teacher Attrition Rates

Category	2013-2014%	2014-2015%	2015-2016%
Overall	14.12	14.84	9.04
BT	23.8	4.10	12.78
Lateral Entry	4.52	0.87	15.62
Career Teacher	37.67	13.36	8.19

As seen in Table 2, the overall state attrition rate for the 2013-2014 school year was 14.12%. The state attrition rate for the 2014-2015 school year was 14.84%, a 1% increase. Finally, the state attrition rate for the 2015-2016 school year was 9.04%. In fact, from the 2014-2015 school year to the 2015-2016 school year, fewer teachers left the profession as compared to previous years.

Although the teacher attrition rate improved after the 2015-2016 school year, understanding the impact of the BTSP on the BT teacher attrition rate for Central County would be beneficial at many levels, including improving the BTSP program.

Consequently, this study was significant because it evaluated the effectiveness of the

BTSP as it impacted teacher attrition in Central County. It further provided insight into whether the district program was helping to reduce teacher attrition by providing BTs the supports necessary to produce highly qualified teachers. This study also provided feedback for the district to continue to improve the BT program in Central County school district.

Definition of Key Terms

Key concepts such as induction program, BT, mentor, attrition, retention, BTSP, and teacher turnover can be described differently, based on context. For this study, these terms were defined as the following:

Attrition. The result when teachers leave the teaching profession (Wiggins, 2010).

BT. A teacher with less than 4 years of teaching experience (Wiggins, 2010).

BT support coordinator. The coordinator supports beginning teachers through classroom visits, responding to areas of concern expressed by BT support mentors and administrators. Quality professional development activities are provided through the BT Support Department for BTs and those who work with BTs: site support leaders, mentors, support mentors, and administrators (Mingo, 2012).

BTSP. A mentoring and induction program in the state where this study took place developed to support BTs within the first 3 years of teaching (Department of Public Instruction, 2010).

Career teachers. Teachers with 4 or more years of experience who have obtained a Standard Professional 2 license (Department of Public Instruction, 2010).

Induction program. The systematic process of training and supporting new teachers, beginning before the first day of school and continuing throughout the first 3

years of teaching (Wiggins, 2010).

Lateral entry. This option is an “alternate” route to teaching for qualified individuals outside of the public education system. Lateral entry allows qualified individuals to obtain a teaching position and begin teaching right away while obtaining a professional educator license as they teach. The Department of Public Instruction (2016) authorizes 3-year lateral entry professional educator licenses on a provisional basis in licensure areas that correspond to the individual’s academic study.

Mentor. A veteran teacher who serves as a coach and supporter of new teachers, assisting in their professional growth through reflective practice, modeling, and classroom observations (Mingo, 2012).

Mentoring. Guidance provided to a BT by educators with multiple years of experience in the classroom (Anthony, 2009).

New teacher orientation. A 3- or 4-day training for new teachers before the beginning of the school year designed to provide information about human resources and district goals and initiatives (Croffut, 2015).

NCEES. The NCEES system includes the professional standards and evaluation processes associated with every educator in the state (Department of Public Instruction, 2016).

Perceptions. Insight, intuition, or knowledge gained by perceiving (Wiggins, 2010).

Retention. The rate at which teachers remain in the education profession as calculated by the state Department of Public Instruction (Mingo, 2012).

Teacher turnover. The departure of teachers from their teaching jobs (Wiggins, 2010).

Zone of proximal development (ZPD). The difference between what a learner can do without help and what he or she cannot do (Vygotsky, 1962).

Summary

“Steep attrition in the first few years of teaching is a long-standing problem. About one-third of new teachers leave the profession within five years” (Darling-Hammond, 2003, p. 2). OSPI (2014) described a need to develop much more effective policies to attract, induct, and retain prepared and committed teachers. Due to the critical problem of attrition in education, as opposed to teacher shortages, teacher support needs to take the shape of continued learning, particularly through effective induction programs (OSPI, 2014).

Chapter 2 includes the current literature regarding teacher attrition and BTs and induction programs. Chapter 3 includes the methodology used for this study.

Chapter 2: Review of Literature

Introduction

At a time when public school enrollment was on the rise, a large number of teachers were headed towards retirement or leaving the profession due to dissatisfaction with working conditions (Camera, 2016). What was previously a reputable profession has become less desirable through the years. Also, enrollment in teacher preparation programs dropped dramatically, having declined 35% nationwide in the 5 years before 2016 (Camera, 2016). The teacher shortage was highly prevalent in the areas of special education, math, science, and bilingual or English-learner education (Camera, 2016); however, the shortages did not stop there. A shortage of teachers in locations with lower wages and poorer working conditions was an unfortunate reality. With 30-50% of BTs leaving the profession within the first 5 years of teaching, education may eventually become known as the profession with the revolving door (Darling-Hammond, 2003). If current supply trends continue, the annual teacher shortage could grow to 112,000 teachers by 2018 (Camera, 2016).

Chapter 2 details the theoretical framework that was utilized for this study and thoroughly describes the current research findings for teacher attrition. Factors that contribute to teacher attrition are presented in depth. Finally, Chapter 2 concludes with a summary of the research findings surrounding the use of BT induction programs to help increase teacher retention.

Historical Context

In the early 1980s, a series of reports began to focus national attention on the possibility of severe teacher shortages in elementary and secondary schools (Ingersoll, 2001). These studies predicted a dramatic increase of new teachers, resulting from two

demographic trends: increased student enrollment and increased teacher attrition due to a graying teaching force (Ingersoll, 2001). These reports also indicated that subsequent shortfalls of teachers would force many school systems to resort to lowering the required standards of teachers to fill openings, resulting in higher levels of underqualified teachers and lower school performance (Ingersoll, 2001). Between 2009 and 2014, teacher education enrollment dropped from 691,000 to 451,000, constituting a 35% reduction rate (Sutcher et al., 2016). This reduction accounted for a decrease of almost 240,000 professionals on their way to the classroom from 2009 to 2014 (Sutcher et al., 2016). The shortage of teachers was not universal but impacted some states, subject areas, and student populations more than others (Sutcher et al., 2016).

Theoretical Framework

This research study utilizes Lev Vygotsky's (1962) sociocultural theory. The major theme in this theory is that social interaction plays an integral role in the development of cognition (Ormond, 2003). The theory focuses on ZPD, the zone or area of exploration where an individual is cognitively prepared but still needs assistance and social interaction to develop fully (Vygotsky, 1962). The Figure illustrates the ZPD framework.

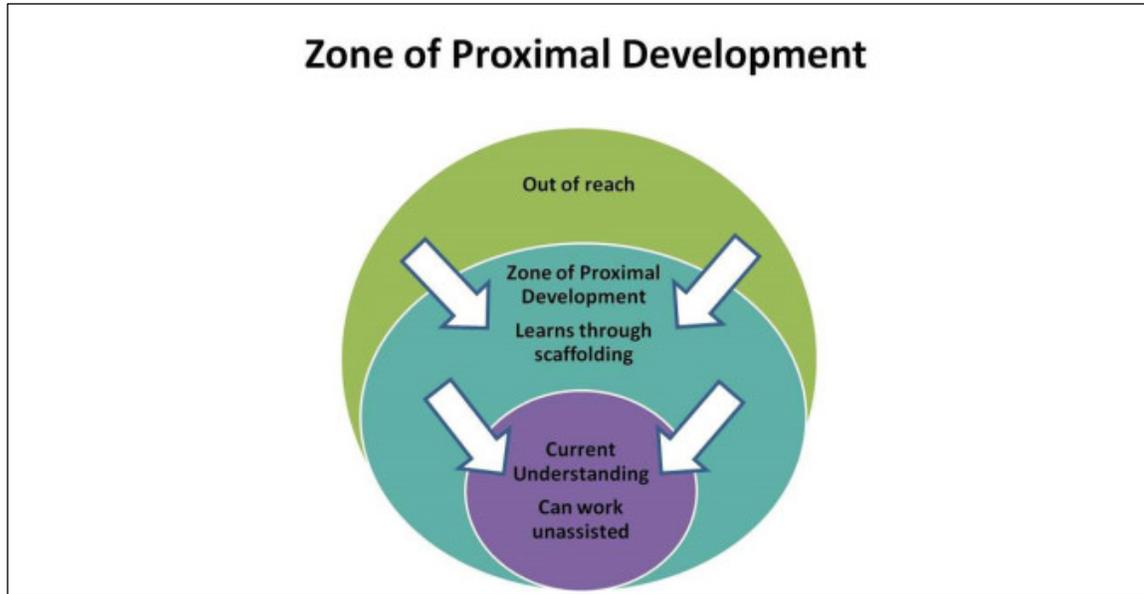


Figure. Theoretical Framework.

As displayed in the Figure, the ZPD is an area of learning that occurs when a person receives assistance from someone with a higher set of skills, a teacher; however, the person in the learning capacity is completely dependent on the teacher and unable to complete the task without the assistance of the teacher. Consequently, the teacher serves as a mentor and helps the individual to master the task, in anticipation of the person in the learning capacity eventually being able to function without assistance (Ormond, 2003). For this study, ZPD was the lens used to examine mentorship for BTs.

The current conceptualization of ZPD has three main elements (Eun, Knotek, & Heining-Boynton, 2008). The first element is the goal, and it is considered to be the cognitive development the learner is trying to obtain. The second element is the individual who is going through the cognitive development. In the case of this research study, the individual is the BT. The third element is the guide or mediator, who is more skilled. For this study, this element was the mentor. The critical factor within this paradigm is the nature of interactions that occur between the two active participants.

These interactions provide the catalyst for determining whether the goal of ZPD is achieved (Eun et al., 2008).

Many studies devoted to ZPD have explored the role of the guide or tutor in guiding the tutee through the process of problem-solving (Eun et al., 2008). According to Eun et al. (2008), the results of these studies indicated the qualities of the tutor were crucial in guiding the development of the tutee. The most significant quality was the tutor's ability to adjust the level of guidance to the current level of the tutee's functioning (Eun et al., 2008). It is important to mention that support beyond the recipient's comprehension level would do little to stimulate the intended development (Eun et al., 2008).

Teacher Attrition and Turnover

Teacher turnover has been a significant phenomenon and a dominant factor behind the demand for new teachers and the difficulties schools have had with hiring qualified teachers (Ingersoll, 2001). Previously, teacher attrition was the single leading factor for the demand of additional teachers in the United States (Shipp, 2015). It was estimated that 40% to 50% of teachers leave the profession within the first 5 years of teaching (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011; Inman & Marlow, 2004). High turnover rates of teachers from schools were of concern not only due to the potential sign of staffing problems but because of the relationship to school cohesion and performance (Ingersoll, 2001).

Characteristics. Substantial past research has focused on determining which kinds of teachers were more prone to leave teaching and their reasons for leaving. In fact, Ingersoll (2001) suggested that teacher turnover was strongly correlated with individual characteristics of teachers. Among the important findings was the amount of

turnover by area of teacher specialty or concentration. Special education, mathematics, and science were typically found to be the highest turnover fields (Ingersoll, 2001). The findings of a study conducted by Guarino, Santibanez, Daley, and Brewer (2004) revealed that schools with higher proportions of minority students, students in poverty, and low-performing students tended to have higher attrition rates. The study revealed that minority teachers were more likely to have lower attrition rates than White teachers, and teacher retention was more likely to be in public schools than private schools (Guarino et al., 2004).

According to Carver-Thomas and Darling-Hammond (2017), turnover rates were 70% higher for teachers who serve a large concentration of minority students. Typically, these schools were staffed by teachers who have fewer years of experience and, often, less training to teach. Teachers of color who disproportionately taught in high-minority, low-income schools and who entered the profession without finishing training had higher turnover rates than their Caucasian counterparts (Carver-Thomas & Darling-Hammond, 2017). Turnover rates were also 50% higher at Title 1 schools, which served more low-income students (Carver-Thomas & Darling-Hammond, 2017).

Additional research indicated an important influence in teacher attrition was age. Researchers consistently found that younger teachers had very high rates of departure. Subsequently, turnover rates declined through the midcareer period and rose again in the retirement years (Ingersoll, 2001). In a recent longitudinal study of a nationally representative cohort, teacher turnover, as measured annually by the combined percentage of movers and leavers after 5 years, was 46%. Seventeen percent of those educators stopped teaching altogether (Aragon, 2016). Until recently, the primary reason for attrition rates was believed to be teachers retiring (Aragon, 2016); however, according

to Ingersoll (2001), although teacher retirement was increasing, the overall rate of turnover accounted for by retirement was minimal. Further, Ingersoll asserted school staffing cutbacks due to layoffs, school closings, and reorganizations accounted for a larger proportion of turnover than retirement. This kind of turnover also accounted for the high rates of attrition in small private schools. More than twice the attrition rate in private schools is reported due to staffing actions than was reported in urban, high-poverty public schools (Ingersoll, 2001).

Reasons. Overwhelmingly, teachers listed job dissatisfaction and pursuing better jobs or careers as reasons for leaving (Ingersoll, 2001). The data showed that inadequate support from school administration, student discipline problems, and limited faculty input into school decision-making, and low salaries were all associated with higher rates of turnover (Ingersoll, 2001). Supporting the findings of Ingersoll (2001), NCTAF (2009) more recently identified four factors found to influence the decisions of teachers who left the teaching profession: working conditions, salaries, level of preparedness, and support and mentoring during the beginning years of teaching.

Expounding on the level of preparation time as a factor in teacher attrition, Darling-Hammond (2010) found that teachers left the profession sooner if they had less preparation before they entered and less mentoring support when they arrived. Teachers who had not taken part in student teaching and those who lacked coursework in child development and learning left at twice the rates of those with complete preparation. Among recent graduates who entered teaching with full preparation, only 14% left within 5 years, whereas 49% of uncertified teachers left within that period (Darling-Hammond, 2010).

In 2009, the U.S. Department of Education surveyed teachers with 1-3 years of

teaching experience who left the classroom during the 2008-2009 school year. The results of the study indicated that 28.6% of BTs left to pursue an alternative career. Approximately 9.6% of BTs left the profession due to dissatisfaction with the administration, and 11.7% left due to a lack of support from administration (U.S. Department of Education, 2009).

As an overall explanation of why teachers leave the profession, Ingersoll (2001) suggested a caveat to teacher attrition. “Not all of the flows out of schools result in a permanent loss of teachers. Temporary attrition represents one form of this revolving door- teachers who leave teaching but return in later years” (Ingersoll, 2001, p. 514). According to Ingersoll, another form of outflow was represented by a migrant who moved to teaching jobs in other schools, which accounted for approximately half of the total teacher turnover. Unlike attrition, teacher migration did not decrease the overall supply of teachers, because departures were simultaneous with new hires; however, teacher attrition was higher than attrition in many other professions (Reeder, 2013). The effect of high teacher attrition was the educational field’s loss of the best and brightest in the profession (Ingersoll & Smith, 2004). In fact, Sullivan (2006) reported the effects of the attrition rate with state-provided data and found that during the 1995-1996 school year, there were 4,201 BTs with no prior teaching experience in the state. After 1 year, 16.3% of those BTs left the profession. Three years later, the rate of those BTs who left the profession rose to 34.1%; and after year five, rose again to 43.8% (Sullivan, 2006).

With turnover rates considered high throughout the country, teacher attrition carried over to novice teachers as well. Ingersoll and Smith (2003) provided a plethora of reasons regarding the difficulty of retaining novice teachers. This list included low teacher pay rates, overcrowded classrooms, and outdated textbooks (Ingersoll & Smith,

2003). Teachers also reported a lack of respect for the profession by parents, students, and administrators. Poor filtering by unions and administrators to remove burned out or incompetent teachers, an overwhelming number of nonteaching duties assigned to teachers, and dilapidated infrastructure were seen as reasons not to return to the teaching profession (Ingersoll & Smith, 2003). In addition, respondents stated that employment of insufficiently prepared or nonqualified teachers, coupled with increased illegal substance abuse, weaponry, violence presence on school grounds, a growing number of students not adequately prepared to commence the school year, and increased student truancy all led to the decision to not return to the education field (Ingersoll & Smith, 2003). The factors previously listed played a role in the national shortage of teachers.

Predictors of Turnover

While the teacher turnover rate was considered to be problematic, a deeper look into the predictors of turnover could help educators and researchers in the future to continue to work to improve the turnover percentage. Ingersoll (2001) conducted a study that examined which of the school-to-school differences in turnover rates remained salient, after controlling for characteristics of teachers. In the study, Ingersoll noted the age of teachers was the most striking predictor of the likelihood of their turnover. Younger (less than 30 years) and older (greater than 50 years) teachers were more likely to depart than were middle-aged teachers (Ingersoll, 2001). According to the study, the odds of younger teachers departing were 17.1% higher than for middle-aged teachers (Ingersoll, 2001).

Classroom subject matter and teacher demographics also showed a high level of predictive value for teacher turnover. Special education teachers were more likely to depart from the profession than other subject teachers (Ingersoll, 2001). Math and

science teachers were not more likely to depart than other teachers. According to Ingersoll (2001), male teachers were less likely to depart than female teachers, and minority teachers were also less likely to depart than White teachers.

Ingersoll (2001) examined teacher turnover regarding school type, public versus private. The results showed that among public schools, teachers in high-poverty schools had a higher rate of turnover than those in more affluent schools. Among private schools, both non-Catholic and Catholic religious schools had more turnover than nonsectarian private schools (Ingersoll, 2001).

The path taken to the classroom also shows predictive value regarding teacher turnover. According to Carver-Thomas and Darling-Hammond (2017), teachers who enter the profession through alternative certification pathways were 25% more likely to leave their schools and the profession, despite controlling for students, schools, and teacher conditions. In addition to the pathway to teaching, lack of administrative support was also a predictive factor in teacher turnover. Carver-Thomas and Darling-Hammond (2017) stated that teacher reports of a lack of administrative support had the strongest relationship with teacher turnover. Data suggest that teachers who strongly disagreed that their administration was supportive were more than twice more likely to leave their school or the profession than teachers who strongly agreed that their administrations were supportive (Carver-Thomas & Darling-Hammond, 2017).

Teacher salary was also considered a predictor of teacher turnover (Loeb, Darling-Hammond, & Luczak, 2005). Baugh and Stone (1982) found that salary was a factor in potential job acceptance, as compared to other professions. Studies employing national data found that teachers were more likely to quit or transfer jobs when they worked in districts with lower wages (Loeb et al., 2005). Hanushek, Kain, and Rivkin

(2001) found that increasing teacher salaries by 10% in a district reduced the probability of a teacher with 0-2 years of teaching experience leaving the district, and by 1% for a teacher with 3-5 years of experience.

National Teacher Shortage

Few educational problems have received more attention in recent times than the failure to ensure qualified teachers in our nation's elementary and secondary classrooms (Ingersoll, 2001). "Retaining teachers is a far greater problem in the United States than recruiting new ones" (Darling-Hammond, 2010, p. 5). The 30% of new teachers who have left the teaching profession in the first few years created a revolving door that destabilized schools and led to a \$2 billion annual deficit for the nation (Darling-Hammond, 2010).

The percent of teachers leaving the teaching field increased substantially over the past 2 decades (Carver-Thomas & Darling-Hammond, 2017). The data indicated that in 1992, 5.1% of public education teachers left the profession, while 8.4% left the workforce in 2005 (Carver-Thomas & Darling-Hammond, 2017). According to Carver-Thomas and Darling-Hammond (2017), the 3% increase in attrition rates was not trivial; it amounted to roughly 90,000 additional teachers needing to be hired across the United States each year. The attrition rate of the United States has been compared to other high-achieving school systems in Finland, Singapore, and Ontario, Canada. These countries typically had annual attrition rates around 3-4% (Carver-Thomas & Darling-Hammond, 2017). If the attrition rates in the United States were reduced by half, the national teacher shortage could be virtually eliminated (Carver-Thomas & Darling-Hammond, 2017).

Recent national analyses suggested potential problems with teacher recruitment and teacher retention. According to recent data from American College Testing (2014),

fewer high school graduates were interested in pursuing education majors and fewer college students were pursuing teaching careers. Of those who did enter the profession, reports of overall job dissatisfaction, a loss of autonomy, and limitations in feedback and advancement were reported (Aragon, 2016).

Research supported a few key points about the teacher shortage. According to Aragon (2016), teacher shortages within states were impacted by the unique education policies that govern that particular state. Variations in state policy made national teacher supply numbers irrelevant when considering state shortages. Another key point was that teacher shortages were often confined to certain subject areas (Aragon, 2016). As previously stated, these subjects typically were math, science, and special education. The last key issue regarding teacher shortage was schools with specific characteristics. Urban, rural, high-poverty, high-minority, and low-achieving schools faced persistent staffing challenges (Aragon, 2016). Working conditions such as lower salaries and larger class sizes, coupled with neighborhood characteristics such as safety and amenities, influenced teacher decisions about where to teach (Aragon, 2016).

Challenges of BTs

“Teaching has been a career in which the greatest challenge and most difficult responsibilities are faced by those with the least experience” (Glickman, Gordon, & Ross-Gordon, 2013, p. 25). BTs in many schools were historically faced with a variety of environmental difficulties that included inadequate resources, difficult work assignments, unclear expectations, a sink-or-swim mentality, and reality shock (Glickman et al., 2013). Further, according to Glickman et al. (2013), once a teacher made the decision not to return the next school year, faculty members claimed the prized positions and materials of the former teacher. These possessions included classroom materials,

desks, tables, and chairs. What was left in the room were often things that had been discarded and were unwanted; thus, for the upcoming year, the BT was often assigned this classroom with subpar furniture and instructional materials (Glickman et al., 2013).

Glickman et al. (2013) asserted that BTs were often forced to take on difficult work assignments. Experienced staff and administrators often placed problem children and low achievement groups with BTs (Glickman et al., 2013). BTs were also often given the more difficult courses to teach and were usually assigned large class sizes (Angelle, 2006). These conditions led to many BTs feeling overwhelmed and rethinking staying in the profession.

According to Johnson and Kardos (2002), a common complaint among first-year teachers was the unpredictability of what was expected of them professionally. Administrators, veteran teachers, and other school community stakeholders expressed conflicting expectations of BTs, leaving them in a constant state of confusion as to which expectations they should try to meet (Johnson & Kardos, 2002). The confusion of conflicting expectations coupled with demanding workloads and sometimes improper training led to challenges faced by BTs. For many reasons, BTs were left on their own to sink or swim (Glickman et al., 2013). Administrators and experienced teachers viewed the first year of teaching as an initiation process that must be passed; therefore, experienced teachers were reluctant to offer support. Some veteran teachers took on the mindset that new teachers needed to go through the process with minimal assistance, just like they had, as part of the initiation process (Cherubini, 2009).

Due to the veteran teacher mindset of initiation, BTs were often unwilling to ask for help from them or administrators when they encountered obstacles related to classroom management or instruction (Cherubini, 2009). The reluctance to ask for help

was because the teaching profession was the only profession where a novice was expected to assume the same responsibility, or more, as experienced colleagues. Novice teachers often did not ask for help for fear of their professional competence being called into question. Consequently, some new teachers went to great lengths to conceal issues they were facing (Cherubini, 2009).

In support of the findings of Cherubini (2009), Veenman (1984) defined reality shock as “the collapse of the missionary ideals formed during teacher training by the harsh and rude reality of classroom life” (p. 143). Every new teacher entered the profession with a schema of what teaching would be like such as classroom management problems, student learning difficulties, and environmental difficulties; however, most new teachers were forced to realize that they were unprepared to deal with the harsh realities of teaching (Chubbuck, Clift, & Alland, 2001).

Mentoring

Since the late 1980s and early 1990s, education reformers saw mentoring as an answer to reform teaching and teacher education (Finney, 2007). According to Finney (2007), the belief was that on-site assistance for BTs, with veteran teachers acting as mentors, would help to decrease attrition for new teachers within their first 3 years. The hope was that seasoned teachers would serve as role models and guide the less experienced teachers in learning new pedagogies and help socialize them to professional norms (Finney, 2007).

Providing expert mentors to coach BTs improved BT attrition, with rates reduced from more than 30% of BTs to as low as 5% in some districts (Darling-Hammond, 2010). Numerous studies found that well-designed mentoring programs improved retention rates along with attitudes, feelings of efficacy, and range of instructional strategies for BTs

(Darling-Hammond, 2010).

In a study conducted by Marable and Raimondi (2007), BTs acknowledged mentoring as the most supportive factor during their first year of teaching. Podsen and Denmark (2000) defined teacher mentorship as “helping novices speed up the learning of a new job or skill and reduce the stress of transition, improving the instructional performance of novices through modeling by a top performer, and socializing novices into the profession of teaching” (p. 31). It was imperative for BTs to have role models of teachers to look up to in hopes of decreasing teacher attrition.

While mentoring was important for BTs, it was imperative that mentors were equipped with the correct skills to ensure effectiveness. Reiman and Thies-Sprinthall (1998) studied ways of promoting mentoring skills. Helping mentors support BTs through all of the daily requirements of the profession was difficult (Reiman & Thies-Sprinthall, 1998). These requirements included lesson planning, assessing student work, communication with students and parents, and professional development (Reiman & Thies-Sprinthall, 1998). Reflection on the process helped BTs and mentors assume an integral part of mentoring (Reiman & Thies-Sprinthall, 1998). Reflection took the form of journaling, role-playing, or discussions (Reiman & Thies-Sprinthall, 1998).

According to Finney (2007), research was still needed to clarify what mentors were envisioned to do, what they did, and what BTs learned as a consequence. Without clarity, new mentor initiatives ran the risk of moving backward where the influence of cooperating teachers and school cultures promoted conventional norms and practices (Finney, 2007).

Wang and Odell (2002) identified four global expectations for mentor teachers. The first expectation was that mentors needed to guide and support novice teachers to

pose questions about current teaching practices to uncover the assumptions underlying curriculum and practices. Also, this expectation encouraged them to reconstruct curriculum and practices to suit the teaching contexts in which they found themselves.

The second expectation was that mentors were encouraged to assist novices in developing mastery of subject matter and connect subject matter knowledge to meet the needs of diverse linguistic and cultural populations. Next, the third expectation was that in the climate of a standards-based movement, student teaching would not be reduced to the singular focus of developing specific teaching techniques and procedures. Instead, student teaching would foster a strong understanding of the relationship between teaching principles and practice. Finally, the fourth expectation was that mentors would not simply impart teaching knowledge to novices but that teaching knowledge would be achieved as a product of inquiry and reflection about one's teaching. Novices needed to be guided to discover knowledge rather than be imparted to it (Wang & Odell, 2002).

In the spirit of guided discovery, the establishment of mentoring programs for BTs provided novice teachers with personal encouragement, assistance in curriculum development, advice about lesson plans, and feedback about teaching (Inman & Marlow, 2004). Since the faculty had prior knowledge about these BTs, mentor pairings were expected to be appropriate and positive for personal compatibility. With the help of a mentoring program, BTs from various schools were paired, providing an ongoing link of familiarity with the ideology, concepts, and dispositions brought from the teacher education program into the BT situation (Inman & Marlow, 2004).

National Recruitment and Retention Initiatives

“The first years of teaching are an intense and formative time in learning to teach, influencing not only whether people remain in teaching but what kind of teacher they

become” (Feiman-Nemser, 2001, p. 1026). According to Carver-Thomas and Darling-Hammond (2017), in an attempt to curb teacher turnover, federal, state, and district policymakers should have considered improving key factors linked with teacher turnover. These factors included compensation, teacher preparation and support, and school leadership (Carver-Thomas & Darling-Hammond, 2017).

State legislatures, legislative research offices, and departments of education examined their teacher shortages by convening task forces and other working groups to explore data and make recommendations to policy makers (Aragon, 2016). The dominant policy response to school staffing problems was to attempt to increase the supply of teachers through a wide range of recruitment initiatives. Programs such as troops-to-teachers were designed to entice professionals into midcareer changes to teaching (Ingersoll, 2001). Other initiatives, like Teach for America, sought to entice the best and brightest into teaching. Alternative licensing programs were also created to ease entry into teaching (Ingersoll, 2001). Last, financial incentives such as signing bonuses, student loan forgiveness, housing assistance, and tuition reimbursement were all instituted to aid in recruitment (Ingersoll, 2001).

Similar to the initiatives described by Ingersoll (2001), the Virginia Department of Education implemented several measures to retain teachers. Among the list of retention strategies was National Board certification, which was described as a “voluntary credential that rewards accomplished teachers as judges by peers” (Elliott, 2006, p. 27). The incentives for teachers to gain National Board accreditation were grants for the initial application, a \$5,000 initial bonus, and a \$2,500 continuing bonus. In 1994, the number of National Board certified teachers in Virginia was one. During the 2005 school year, this number increased to 913. With salary being a predictor of teacher turnover (Loeb et

al., 2005), the hope was that teachers having the opportunity to earn extra income would keep teachers in the classrooms.

Induction Programs

“If you want to win the game of education, you need to play for keeps” (Wong, 2002, p. 1). Estimates revealed between 40% and 50% of new teachers will leave the profession within the first 7 years, and more than two thirds of those will leave in the first 4 years of teaching (Wong, 2002); however, Wong (2002) reported the attrition rates among teachers in two school districts – Leyden High School District in Franklin Park, Illinois, and Lafourche Parish Public Schools in Thibodaux, Louisiana – to be only 4.4% and 2.2% respectively. The explanation of the low attrition rates in those two school districts was attributed to their new teacher induction programs (Wong, 2002).

The purpose of teacher induction programs was to provide instruction in classroom management, effective teaching techniques, assistance in reducing the difficulty with transitioning to the classroom, and maximizing teacher retention (Anhorn, 2008). Other goals of induction programs included weeding out incompetent teachers, increasing student achievement, and ending the feeling of isolation that many faced in the profession (Kneer, Reiter, & Shackelford, 2009). Likewise, another school district in Louisiana tried to implement an effective induction program, which resulted in improved teacher satisfaction. The Lafourche induction program was known as the Framework of Inducting, Retaining, and Support Teachers (FIRST). It became so successful that Louisiana adopted it as a statewide model for all school districts (Wong, 2002). More than 99% of new teachers who participated in the Lafourche induction program completed the performance-based Louisiana Teacher Assistance and Assessment Program, which was a requirement for teacher certification (Wong, 2002). Wong (2004)

makes mention of how induction and mentoring are often used interchangeably:

There is much confusion and misuse of the words mentoring and induction. The two terms are not synonymous, yet they are often used incorrectly. Induction is a process—a comprehensive, coherent, and sustained professional development process—that is organized by a school district to train, support, and retain new teachers and seamlessly progresses them into a lifelong learning program.

Mentoring is an action. It is what mentors do. 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 that leads to becoming an effective teacher.

Mentoring is not induction. A mentor is a component of the induction process.

(p. 42)

As Wong described, mentoring and induction are different but are used interchangeably.

Table 3 depicts the differences between mentoring and a comprehensive induction program.

Table 3

Mentoring and Induction

Mentoring	Comprehensive Induction
Focuses on survival and support	Promotes career learning and professional development
Relies on a single mentor or shares a mentor with other teachers	Provides multiple support people and administrators- district and state assistance
Treats mentoring as an isolated phase	Treats induction as part of a lifelong professional development design
Limited resources spent	Investment in an extensive, comprehensive, and sustained induction program
Reacts to whatever arises	Acculturates a vision and aligns content to academic standards

As illustrated in Table 3, major differences between mentoring and comprehensive induction existed. Mentoring focused on BTs surviving the daily duties of a teacher but did not promote the ongoing career learning and professional development that was essential to increasing longevity in the field (Wong, 2004). Further, Wong (2004) described that the setup of a mentoring system relied on a single mentor who may or may not have had more than one mentee. For an induction program, BTs required multiple levels of support, including support from the district and state level. Last, the major difference between mentoring and an induction program was mentoring was treated as an isolated phase; and in an induction program, mentoring was deemed a lifelong process (Wong, 2004).

To ensure that teachers were qualified to meet the demanding requirements and the learning needs of all students, quality preparation for teachers, rigorous accreditation standards, and licensure that met high standards were all needed. NCTAF (2003) described the qualifications of a great teacher. According to the organization, great teachers had a deep understanding of the subject they taught; worked with a firm conviction that all children could learn; responded to individual learning needs; knew how to use the Internet and modern technology to support student mastery of content; were eager to collaborate with colleagues and other stakeholders; took on leadership roles in their schools and profession; and were models, instilling a passion for learning in their students (NCTAF, 2003). These were the attributes that BTs should have aspired to possess upon completion of an effective induction/teacher preparation program.

NCTAF (2003) identified six dimensions of effective teacher preparation programs. The first dimension was careful recruitment and selection of teacher candidates (NCTAF, 2003). Thoughtful selection of candidates increased the likelihood

that a teacher preparation program would develop individuals who were academically well prepared and appropriately suited to work with children and young adults in the classroom setting.

The second dimension was to have a strong academic preparation for teaching (NCTAF, 2003). “Teacher candidates, no matter their experience or type of preparation program, must have a sound knowledge base for teaching; they must become actively engaged with the content and methods of inquiry that make up an academic discipline” (NCTAF, 2003, p. 20). Teachers who earned a degree or had experience in the field were not enough to profess mastery. The knowledge base of teaching was incomplete unless teachers mastered not just what they knew but how to teach it. To do this, teacher candidates must have learned professional, state, and district standards of learning for their discipline (NCTAF, 2003).

The third dimension called for strong clinical practice to develop effective teaching skills (NCTAF, 2003). Integration of knowledge and skills in well-designed, supervised clinical experiences were essential to highly qualified teachers. “The lack of clinical skills and classroom experience is a significant factor in the high levels of burnout and attrition found among new teachers throughout the country” (NCTAF, 2003, p. 20).

The fourth dimension of quality teacher preparation programs included entry-level teaching support in residencies and mentored induction (NCTAF, 2003). According to NCTAF (2003),

String residency and mentored induction experiences during their initial years in the classroom provide BTs with invaluable support as they lay the groundwork to become accomplished teachers. A well-planned, systematic induction program

for new teachers is vital to maximizing their chances of being successful in any school setting. (p. 20)

Modern language technologies (NCTAF, 2003) were the fifth dimension of quality teacher preparation programs. According to NCTAF (2003), teachers in 21st century schools became technology-proficient educators, well prepared to meet the learning needs of students in the digital age. Fluency in technology assisted in promoting student learning, diagnosing stumbling blocks, and tracking and analyzing student and class progress. Teachers prepared to use technology to promote their professional growth by networking with professional learning communities and sharing and expanding their expertise by regularly communicating with colleagues (NCTAF, 2003).

Finally, the sixth dimension of quality teacher preparation programs involved the assessment of teacher preparation effectiveness (NCTAF, 2003). Programs that assessed the performance of teacher candidates provided a lens for improvement. Assessment of teacher preparation went beyond summative evaluations, but “ongoing formative assessments should encourage teachers to continually reflect on their learning and how it will be applied and improved in the classroom” (NCTAF, 2003, p. 20).

As teacher education programs continued to inform teachers, they focused on ways to assist with the retention of good BTs. Many colleges and universities provided career placement services, but many BTs were poorly matched with the schools where they began their teaching careers (Inman & Marlow, 2004). According to Inman and Marlow (2004), teacher education programs provided novice teachers with opportunities to visit and interact with teachers and administrators in real school settings. These visits enabled the BT to gain greater knowledge about the kind of support offered to new teachers, the expectations of other teachers and the administration, and the community in

which the students lived.

Regional Induction Programs

States like the one in this study were consistently depending on induction programs as the primary support for BTs. According to Wong (2005), induction was “a comprehensive process of sustained training and support for new teachers” (p. 41). The key elements of induction programs varied by the types of services received, the program purpose, and the duration and intensity of involvement (Ingersoll & Kralick, 2004).

A report presented to SBE (2008) included a review of the induction programs in this state’s public school systems. Since 1998, all state teachers new to the profession were required to participate in a new teacher orientation as part of their induction program (SBE, 2008). SBE required each public school system to develop an Initial Licensure Plan describing their program for BTs from year one to year three.

Specifically, each BTSP plan was required to provide a comprehensive program for BTs. Also, the BTSP was required to be aligned with the BT Support Standards and, when monitored and audited, had to demonstrate proficiency. The plans were required to include four components: (a) orientation, (b) mentor support, (c) administrative support, and (d) professional development (SBE, 2008).

In addition to the components previously listed, the plans were required to include a documented process for identifying and verifying all BTs, a plan for implementation of a sound BT induction process, and a formal process for conducting observations and a summative evaluation on all BTs (SBE, 2008). Further, a plan for participation in BTSP monitoring and a plan for participation in the BTSP peer review process were required. A statement of how each BT’s personnel files (files that included the teacher’s PDP and performance evaluation reports) were filed and secured was required to be submitted and

included a plan for a timely transfer of BT files to subsequent employing LEAs, charter schools, or nonpublic institutions within the state (SBE, 2008).

The state in which this study took place also created a responsibilities list for all stakeholders of the BT program. The list was delineated by school, principal, and mentor responsibilities. According to the responsibilities list, each school provided BTs with orientations, professional development, and personal and professional support opportunities for new teachers to observe best practices in teaching and learning (SBE, 2008). The suggested responsibilities also included providing feedback on teacher work in light of student achievement data and district performance criteria and various types of support including informational, instructional, professional, personal, and logistical (SBE, 2008).

School principals or administrators were described as essential stakeholders in BT programs. Responsibilities of the principal included conveying to new teachers the philosophy of how students learn, the school history, the special traditions and accomplishments, the school improvement plan, and their role in the plan. In addition, the principal was responsible for clearly articulating that the entire staff had a responsibility for informal mentoring of new teachers and reducing additional responsibilities of new teachers (SBE, 2008). The principal was responsible for interacting with each new teacher face to face at least once a week for the first semester, assigning a “buddy” teacher to make sure new teachers were provided the essential information about the school and the district, and ensuring that resources were available to BTs (SBE, 2008). Further, principals were responsible for assuring the front office staff and custodians offered assistance in obtaining and adjusting resources both at the beginning of school and throughout the year. Finally, the principal’s responsibilities

included encouraging all staff members to engage in welcoming, supporting, and collaborating with new staff members and making sure each new teacher received a copy of the Common Core State Standards and/or Essential Standards, District/School Pacing Guides, and the School Improvement Plan (SBE, 2008).

Mentors were also essential stakeholders in BT programs. The mentor's responsibilities included assisting new teachers with setting up their classrooms, aiding with classroom management, and ensuring new teachers had appropriate curriculum documents (SBE, 2008). In addition to assistance directly related to the classroom, mentor responsibilities included supporting BTs with adjusting to the emotional side of teaching. Mentors provided new teachers with the opportunity to meet together to network and discuss instructional practices, keep an open-door policy with daily communication, serve as an advocate and a resource, and provide a variety of perspectives (SBE, 2008). Also, mentors were responsible for providing model lessons when appropriate, implementing guidelines established by district and school, and working with the new teacher to identify the cause of any disruptive or resistant behavior and to plan the intervention based on the identified cause (SBE, 2008).

In Central County school district, a teacher who was interested in becoming a mentor must have had at least 5 years of teaching experience, a continuing license, and the last year of teaching must have been in Central County school district. The mentor then must have completed an online mentor application. Upon selection, prospective mentors were required to attend a 3-day mentor training course during the summer. The mentoring program was an effective way for veteran teachers to showcase growth on Standard 1: Leadership and Standard 5: Reflection on the teacher evaluation tool.

BT Program Evaluation

The researcher used an adapted survey that was developed by another researcher for the BTs, mentor teachers, and administrators. Croffut (2015) conducted a program evaluation of a BT program to determine if the BT program was successful in meeting the needs of BTs in the district. The research study had sample sizes of 53 first-year teachers, 42 second-year teachers, 42 third-year teachers, 37 principals, and 70 mentors. The survey results reported that BTs did not believe that they needed assistance in many areas when compared to data collected by mentor teachers and principals (Croffut, 2015). BTs responded that needing assistance was more insignificant than the mentor and principals responded on the survey.

The instrumentation used by Croffut (2015) was adapted from the Oregon Mentoring Program: Beginning Teacher Survey (Oregon Department of Education, 2017). In 2007, the Oregon Legislature passed HB 2574, authorizing the Oregon Department of Education to establish a BT and administrator mentoring program (Oregon Department of Education, 2017). The Oregon Mentoring Program was designed to support activities related to evidence-based mentorship for BTs and administrators (Oregon Department of Education, 2017).

Mingo (2012) conducted a program evaluation of the BT program in a district in the state where this study took place. In the study, Mingo included teachers in their second, third, and fourth year of teaching who completed the district's BTSP. Data were also gathered from mentors, administrators, site support leaders, the BTSP coordinator, and the assistant superintendent of human resources. Both qualitative and quantitative data were collected to assess the effectiveness of the BT program and its impact on teacher retention (Mingo, 2012). Mingo surveyed BTs, mentors, and administrators as

well as conducted focus group interviews and face-to-face interviews to further gather more insight into the effectiveness of the BT program.

The results of the study revealed that the BT Induction Program did have an impact on teacher retention. Data from the interview, focus group responses, survey data, and documentation about the BT Induction Program demonstrated that there were consistencies in specific areas (Mingo, 2012). The areas of consistency included mentors supporting BTs, BTs communicating their need for administrative support, and professional development provided by site support leaders (Mingo, 2012).

Administrator Support

Administrative support also has an effect on the productivity of BTs. Protheroe (2006) stated,

New teachers working in schools run by principals they describe as effective and competent had a much easier transition into teaching. Teachers listed several attributes and behaviors of principals and other school administrators that made a difference to their introduction to teaching. (p. 34)

According to Protheroe (2006), principal support was to help novice teachers focus his/her professional growth activities. In-service was relative to the day-to-day practices. Principals were clear about the expectations and perceptions. BTs needed to know what was expected of them and what supports they could expect from administrators (Protheroe, 2006). Researchers at the Project on the Next Generation of Teachers studied factors influencing new teacher morale and retention (Protheroe, 2006). Consistent problem areas were found that could be addressed by principals. BTs reported being eager to watch expert teachers and develop their craft with guidance, but a small number of respondents reported having access to experienced colleagues (Protheroe,

2006). BTs also reported that schedules rarely provided time for joint planning and observation, and collaboration was neither expected nor encouraged (Protheroe, 2006).

“Administrators should focus on continuing to provide all teachers, but particularly BTs, with positive experiences in support of the new ideas they bring with them from their teacher education programs” (Inman & Marlow, 2004, p. 612).

According to Inman and Marlow (2004), administrators should have provided regular, structured faculty developments so BTs had a forum to share ideas and become familiar with school curriculum. Teaming situations between the beginning and veteran teachers should be arranged, basing the matching of novice and experienced teachers on common information gathered during classroom visits (Inman & Marlow, 2004).

Fultz and Gimbert (2009) reported that the pace at which novice teachers adapted and developed and chose whether to stay or leave the teaching profession appeared to be related to a principal’s involvement with BTs. Throughout the process of matriculation from a university program to the career setting, principals were expected to identify BT strengths and areas for improvement and provide plentiful support outlets to address these needs.

Findings from a study conducted by Jackson (2008) stated that the principal “plays five key roles in helping to retain teachers: (a) caring listener, (b) supportive advocate, (c) respectful colleague, (d) open-minded team player, and (e) enthusiastic facilitator” (p. 112). In conjunction with the daily running of a school, principals must also embody the characteristics of effective leadership (Fultz & Gimbert, 2009).

Principal support was shown by a principal taking time and showing concern for not only all teachers, but BTs especially (Fultz & Gimbert, 2009). Research collected by Fultz and Gimbert (2009) revealed four themes specifically related to principal actions

with BTs. Those themes were relationships, expectation, perceptions, and teacher development.

Theme one states that effective principals cultivated a positive relationship with teaching staff. To build rapport, principals were ready to guide and advise teachers by modeling acceptance and praise (Fultz & Gimbert, 2009). Although a new teacher's understanding of the school culture and climate was important, cultivating peer relationships between novice and veteran teachers was equally important (Fultz & Gimbert, 2009). Providing a culture of learning and development allowed for continued growth for BTs through collaboration with more experienced teachers (Fultz & Gimbert, 2009).

The second theme that emerged was expectation. New teachers needed to understand their roles and responsibilities as well as their position in the organization of the school to become effective leaders (Fultz & Gimbert, 2009). To be specific, new teachers knew what was expected of them regarding classroom management, student discipline, documentation of student progress, and the implementation of curriculum and instructional strategies (Fultz & Gimbert, 2009).

The third theme highlighted the perceptions held by both the principal and the teacher. Effective principals held realistic views about novice teacher employment performance and provided support to assist new teachers in developing and sustaining skills for successful classroom instruction (Fultz & Gimbert, 2009). Also, novice teachers were encouraged to suspend negative perceptions that may have previously formed and allow effective principals to introduce a positive environment conducive to student learning and new teacher development (Fultz & Gimbert, 2009).

The fourth theme focused on teacher development opportunities that promoted BT

success as an important characteristic of a school leader. Effective principals implemented meaningful mentoring programs that promoted collegial inquiry and support (Fultz & Gimbert, 2009). Research shows that 60% of principals felt that a mentoring program was one of the most influential resources to teachers (Fultz & Gimbert, 2009).

The results of the study conducted by Fultz and Gimbert (2009) identified multiple processes by which “highly effective” administrators created and maintained an environment that assisted BTs in discovering and analyzing their place within the school community while cultivating the skills needed to master the profession.

Professional Development

“Professional development in PK-12 schools historically has been ineffective” (Glickman et al., 2013, p. 36); however, effective professional development was essential to the stability of a school. “Effective professional development is job-embedded and ongoing; involves teachers in the planning, delivering, and assessing of learning activities; and provides follow-up for adapting new learning to the classroom” (Glickman et al., 2013, p. 36). For decades, research has shown that teachers who experience frequent, rich learning opportunities have developed principles to teach in more effective ways, yet few teachers were exposed to such training. More typically, teachers experienced professional development that was episodic and disconnected from their teaching interests (Little, 2006). This pattern speaks to the promise and limitations of professional development as it is typically organized.

An assistance program for BTs was an important component of a school’s professional development. Support for BTs came in different forms, including an experienced teacher as a mentor, skill training, and support seminars (Glickman et al.,

2013). BTs reported that having a mentor teacher to observe them and discuss matters related to teaching was a powerful source of development (Glickman et al., 2013). Upon reviewing 15 studies on BTSPs, Ingersoll and Strong (2011) concluded that support programs resulted in retention of BTs, improved teaching, and higher student achievement (Glickman et al., 2013). “Beginning teacher assistance programs also can socialize new teachers into the shared leadership, collaborative work, collegiality, and common cause associated with dynamic schools” (Glickman et al., 2013, p. 36).

Reviews of research on professional development identified some characteristics associated with successful professional development programs. These characteristics included involvement of teachers in planning, implementing and evaluating their professional development, a focus on teaching and learning, and integration of professional development goals with school improvement goals (Gordon, 2004).

Some other characteristics of professional learning included active learning, the use of inquiry, and the opportunity for self-reflection (Gordon, 2004). In addition, professional development allowed for the inclusion of content on diversity and cultural responsiveness; the follow-up to support application learning; ongoing, data-based program assessment; continuous professional development that became part of the school culture; and the development of leadership capacity (Gordon, 2004). While the characteristics listed were associated with successful professional development programs, one characteristic of effective professional development included the integration of schoolwide, group, and individual goals (Glickman et al., 2013).

Buckeye School District’s efforts created an effective professional development program for BTs (Glickman et al., 2013). A key component of the program was a pool of experienced mentor-teachers (Glickman et al., 2013). A committee selected volunteer

mentors. Selection criteria included years of experience in the school system, effective teaching performance, interpersonal skills, past commitment to the profession, flexibility, and willingness to spend time helping BTs (Glickman et al., 2013).

The selected teachers then took part in an intensive mentor preparation program. The program included an introduction to the knowledge base on problems of BTs, BT assistance programs, and mentoring, an overview of the district's BT assistance program, and research on effective classroom management and effective teaching (Glickman et al., 2013). The mentoring program also included lessons on the principles of adult learning; adult and teacher development; goal setting and action planning; the coaching of teaching, including conferencing skills and observation skills; and action research (Glickman et al., 2013).

While district-level development proved to be beneficial to BTs, school-based professional development provided staff members with new methods of learning instruction (Glickman et al., 2013). Various school renewal networks such as the League of Professional Schools, the Coalition of Essential Schools, the Accelerated Schools, and the Comer Schools varied the type of instruction they provided (Gordon, 2004). These schools now employ instructional strategies such as Socratic discussions, cooperative learning, nongraded schedules, and models of teaching (Gordon, 2004). The schools planned their retreats, staff-development days, and summer activities (Gordon, 2004). The results of some of the initiatives created by these schools resulted in major improvements in student achievement, higher school attendance, and lower incidences of discipline and vandalism (Gordon, 2004).

Professional development on the individual scale was also beneficial to BTs. Leander Middle School in Texas has an individual improvement plan that is tied to the

school's annual improvement plan (Glickman et al., 2013). Individualized projects follow the plan, do, study, act (PDSA) cycle and are documented in teacher portfolios (Glickman et al., 2013). In the planning phase, teachers gathered an assortment of self-assessment data; analyzed the data; and designed individualized professional development plans to include objectives, learning activities, resources, and plans for self-evaluation (Glickman et al., 2013).

The studying phase involved gathering data to evaluate the plan's effectiveness (Glickman et al., 2013). Data were collected on the teacher's professional growth regarding student learning (Glickman et al., 2013). Evaluation data resembled teacher reflective writing, classroom observation data, or artifacts of student work (Glickman et al., 2013).

The last stage, or acting phase, consisted of a portfolio conference with the teacher's supervisor (Glickman et al., 2013). The conference served as a time for the teacher to reflect on the completed activities, learning that took place, and future goals for further professional growth (Glickman et al., 2013). At Leander Middle School, all adults, including teachers, supervisors, and staff, implemented individual development plans and shared their projects at a portfolio fair during the school year (Glickman et al., 2013).

Summary

Teacher attrition is a national problem that plagues many teachers, schools, and children. What is even more alarming is the lack of a universal solution to this problem. The literature was extensive with studies about the importance of reducing teacher attrition and ways in which to eradicate this problem. What once was thought to be the problem of teacher attrition was, in fact, a lack of teacher candidates. According to the

National Commission on Teaching and America's Future (2003), the inability of schools to support highly qualified teachers was not due to too few teachers entering the profession but, rather, too many leaving the profession for other jobs. This issue must be given priority for our children to be provided with a quality education and to produce productive citizens in the future.

Not only has teacher turnover led to shortages, but the loss of teachers also created a shortage in the schools they left behind (Carver-Thomas & Darling-Hammond, 2017). The estimated costs to urban schools, once a teacher leaves, is more than \$20,000. According to Carver-Thomas and Darling-Hammond (2017), high turnover rates reduced student achievement in the classrooms of students directly affected as well as others in the school.

To address teacher attrition, school districts must address the problem with retaining qualified teachers (Ingersoll, 2001). Teachers must be properly trained to maintain stability (Smith & Ingersoll, 2004). The predictors and reasons for teacher turnover must be addressed and remedied to ensure effective teachers remain in the classroom.

Chapter 3: Methodology

Introduction

In this chapter, the methodology used in this mixed-methods study of the BTSP in a Central County school district is discussed. Included in this chapter are an explanation of the research design, research questions, study design, procedures, participants, data collection procedures, and data analysis.

The purpose of this mixed-methods study was to evaluate the effectiveness of the BTSP located in a public school district. By limiting the study to one region in one school district, the researcher did not generalize findings to all teachers, mentors, and administrators but offered preliminary observations and recommendations into the effectiveness of the BTSP in Central County school district. The evaluation of this BTSP allowed for essential stakeholders to make decisions about the future of the program and the results used to make recommendations for the BTSP.

The following research questions guided this study:

1. What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview?
2. What is the impact of the BT program as measured by the teacher attrition rate for BTs?
3. How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and the BT coordinator interview?

Participants and Research Sites

To assess the various aspects of the program, participants in this study included

first-, second-, and third-year BTs, mentor teachers, a BTSP site administrator, and the BTSP coordinator for the region in which this study was conducted.

As previously stated, this research study took place in Central County school district. This school district was comprised of 171 schools serving approximately 160,000 students. There were 104 elementary schools, 33 middle schools, 26 high schools, and four special/optional schools located throughout the district. The district employed approximately 10,000 teachers. Due to the large capacity of teachers in this district, this evaluation focused on the BTs in the high schools of the southern region of the Central County school district. BTs from each of the 10 high schools used for the study were invited to participate in a BT survey to gauge perceptions of the program. The BTs who participated in the survey were asked to volunteer to participate in focus group interviews to further discuss perceptions of the BT program. Convenience sampling, described as a type of nonrandom sampling that allows the researcher to select study participants based on varying criteria (Creswell, 2014), was utilized to allow the researcher to include subjects who were easily accessible (Creswell, 2014).

BTs. All high school BTs in the southern region of Central County were invited to participate in the study ($n > 100$). The number of high school BTs in the southern region of the district consists of 43 first-year teachers, 55 second-year teachers, and 66 third-year teachers. The researcher strived for a 50% response rate for this study. According to Fowler (2009), there was no agreed upon minimal response rate for research survey methods, but the consensus was that 50% of the sample should have responded to the survey instrument. Table 4 shows an analysis of the number of schools in the southern region by level and the number of total teachers and the number of new teachers.

Table 4

High Schools in the Southern Region, 2017-2018

School Name	# of Total Teachers	BT1	BT2	BT3	# of BTs
School 1	113	2	2	5	9
School 2	81	5	4	4	13
School 3	141	5	6	9	20
School 4	5	0	1	0	1
School 5	121	5	7	8	20
School 6	159	9	12	6	27
School 7	144	7	9	6	22
School 8	110	2	5	9	16
School 9	124	4	2	4	10
School 10	137	4	7	15	26
Total	1,135	43	55	66	164

Table 4 illustrates the BTs in the 10 schools that comprised the southern region of Central County. There was a total of 164 BTs in the 10 high schools that were used for this study. Each school had a varied amount of first-year, second-year, and third-year teachers.

In addition to participation in the survey (Appendix A), a second sample was examined by conducting focus group interviews (Appendix B) with the BTs. Creswell (2014) noted focus groups allowed a researcher to elicit views and opinions from the participants. Participants from the BT survey volunteered to participate in the focus group interviews by providing their email address on the survey form.

Mentor teachers and site representatives. Mentor teachers at the 10 high schools that were used for this study were invited to participate in a survey (Appendix C). The researcher emailed a survey link to all identified mentor teachers at each of the 10 high schools included in the study.

The principal or designated administrative representative for the BTs from the 10 high schools in the southern region of Central County school district were also surveyed (Appendix D). Administrators were emailed a Likert scale survey that contained items

pertaining to the support BTs received from their principal/administrators.

Additional information concerning the goals and objectives of the district's BTSP were provided through an interview (Appendix E) with the BT coordinator for the southern region of the district.

Instruments

Quantitative data were collected for this research by administering Likert scale surveys to BTs, mentors, and administrators. Qualitative data were collected using the open-ended items from the surveys, focus group interview questions, and an interview with the BT coordinator.

Survey. The BT Survey was used to assess the perceptions of BTs in the BTSP in the district. The survey was adapted from a study conducted by Croffut (2015). Approval to use this survey, found in Appendix F, was obtained by the researcher and adapted to fit the needs of the current study. The survey for this study was comprised of four sections: background information (3 items), BT needs (23 items), support (16 items), and assessment of the BT program (16 items). The survey for the mentors and administrators consisted of two sections: needs of BTs (23 items) and BT support (15 items).

Validity and reliability. Creswell (2014) defined qualitative validity as the means in which a researcher checked for the accuracy of the findings by employing certain procedures. Creswell stated that reliability indicated that the researcher's approach was consistent across different researchers and different projects. The researcher obtained permission from Croffut to use the adapted BT survey used in the researcher's study, but Croffut (2015) did not report the validity or reliability of the BT survey. Upon personal communication with Croffut, the researcher determined that

validity and reliability were not calculated in the original study, but the author adapted the survey from the Oregon Department of Education's (2017) mentoring program BT Survey. The researcher established content validity for the surveys used in this study. Establishing content validity is necessary when conducting a new measurement procedure or when revising an existing one, as described by Haynes, Richard, and Kubani (1995). Haynes et al. (1995) noted that the validity and reliability of the content should be tested before the use of the instrument. The researcher utilized a third-party content area expert to analyze the surveys and establish content validity.

Survey items were aligned to the goals of the BT program, as discussed in Chapter 1. The alignment of the survey items to the goals of the program are depicted in Table 5. This alignment helped to prove the validity of the survey instrument.

Table 5

Survey Items Aligned to Program Goals

BTSP Goals/Standards	BT Survey Items
1. To help new teachers improve skills and become successful educators	<ul style="list-style-type: none"> - Awareness of school policies and rules - Having adequate time to prepare - Interaction with parents and guardians - Knowledge of subject matter - Planning lessons and activities
2. Ensure that BTs meet the state's professional teaching standards	<ul style="list-style-type: none"> - Obtaining guidance and support - BT professional development - Effective use of different teaching methods and strategies - Motivating students - Working with slow learners - Working with students of different ethnic and cultural backgrounds
3. BTs impact the learning of all students in distinguished ways	<ul style="list-style-type: none"> - Assessing student work - Classroom discipline - Classroom management - Determining student learning levels of students - Effective use of different teaching methods and strategies - Motivating students - Working with slow learners - Working with students of different ethnic and cultural backgrounds
4. BTs choose to remain in the profession and become future masters of the profession, teacher leaders, skilled administrators, and superintendents	<ul style="list-style-type: none"> - Building relationships with principals and/or administrators - Building relationships with other teachers

Table 5 references the alignment of the BT Survey items to the goals of the BTSP. This alignment was used to evaluate the effectiveness of the program. Common themes were analyzed based on participant responses. Participant responses also helped determine topics of discussion for the focus group with BTs.

Focus group. The focus group interview questions were used to evaluate further the BT program's impact on retaining teachers. The focus group questions (six

questions) were adapted from the study conducted by Croffut (2015). Approval to use the focus group interview questions was obtained by the researcher and adapted to fit the needs of the current study. Creswell (2014) recommended developing an interview protocol for asking questions and recording answers during a qualitative interview. The interview protocol for this study is referenced in Appendix G. Participants also signed a consent form (Appendix H) showing that they understood that participation in the study was voluntary and that they had the right to withdraw from the study at any time.

The BTSP rested on five program standards for BTs. Those standards included a systematic support for high quality induction programs; mentor selection, development, and support; mentoring for instructional excellence; BT professional development; and formative assessment of candidates and programs. These standards served as a starting point in terms of themes in analyzing the responses of the focus group interview.

Interview. The interview questions for the BT mentor coordinator were originally developed by Mingo (2012) in a study conducted based on the objectives of the school system's BT program. Approval to use these questions, Appendix I, was obtained by the researcher and adapted to fit the needs of the current study.

Procedures

IRB. Approval of the study was obtained through the Institutional Review Board (IRB) at Gardner-Webb University and the Central County School District Office of Data and Accountability.

Survey. Upon approval, an email was sent from the researcher to the BTs, mentor teachers, and administrators in the 10 high schools in the southern region of the district. Included in this email was the request of asking the BTs, mentor teachers, and the administrative site representative in their school to participate in the study and a link

to the survey. All participants were required to consent to participate in the study. A consent statement was included in the survey with a message that stated by clicking on the next button, the respondent agreed to consent. All subjects were informed of procedures, the intent of the study, and potential risks associated with participation in the study through the survey link.

To maximize the potential of survey responses, the researcher inserted the first item of each survey into the hyperlink that housed the individual survey. The survey included Likert scale responses as well as open-ended items. The researcher administered a six part, 56 item Likert scale survey to BTs. In addition, the researcher administered a four part, 39 item Likert scale survey to the mentor teachers in the study. Finally, the researcher administered a four part, 38 item Likert scale survey to the administrators in the study. The researcher collected quantitative and qualitative data through the use of survey items, an interview, and focus group. Data were gathered to evaluate the effectiveness of the BTSP in retaining novice teachers.

Focus group. In addition to the survey, the BTs who participated in the BT survey were invited to participate in a focus group. The researcher received the email addresses of the survey participants who volunteered to be a part of the focus group. The researcher emailed a poll to gather dates and times to meet with the participants to further dialogue about the perceptions of the BTSP to BTs.

Interview. The researcher used the goals of the district's BTSP to align themes by comparing the specifics of the goals with the responses of the participants.

Research sample. The sample size was determined based on the margin of error the researcher was comfortable with, the confidence level for the margin of error, and an estimate of the percentage of the sample size who would respond (Fowler, 2009). Using

Fowler's (2009) table, the expected response rate was approximately 169 participants, roughly 50% of the population. The researcher took several steps to ensure this response rate of 50%. Once the initial email requesting participation was sent, the researcher evaluated how many respondents had taken the surveys. After 1 week, the researcher sent another email to the population informing them that the deadline to complete the survey would end in 1 week. After an additional week, the researcher closed the survey and started to analyze the data responses. If the intended sample size was not met, the researcher would have included this information as a limitation of the study.

Data Collection Procedures

Data collection began with the surveys that were administered to the BTs, mentor teachers, and an administrative representative. The survey was live for 2 weeks. The researcher sent a reminder email to the BT coordinators at each of the 10 schools to remind them to email the BTs, mentor teachers, and administrative representative to remind them to take the survey.

The researcher coded survey items using the same Likert scale for each item. "Coding is the process of organizing the data by bracketing chunks and writing a word representing a category in the margins" (Creswell, 2014, p. 197). The researcher categorized open-ended question responses into common themes. The collected data were used to determine the perceptions of BTs, mentor teachers, and administrators about the BT induction program and its impact on retaining teachers.

Phase I. Phase I of the study consisted of the administration of an anonymous survey. BTs, mentor teachers, and a principal designee of the 10 high schools that were used for this study were asked to participate in an online survey to gauge perceptions about the county's BT Program. Participants were informed that participation in the

study was voluntary.

Phase II. Upon the completion of Phase I data collection, Phase II of the research study, which included qualitative data, was implemented. The qualitative data came from focus group interviews and a face-to-face interview.

The focus group interview was conducted after the gathering and analysis of the survey data to dive deeper into the perceptions of BTs concerning the BTSP program. Focus groups are unique in the fact that unlike face-to-face interviews, the discussions and exchanges of the participants “create a process of sharing and comparing” (Morgan, 1998a, p. 12) that can only exist in a group interview. The goal was that with this opportunity to share, participants would explore topics and questions with more depth than they could on the survey.

The focus group interview was moderately structured with a set of preplanned questions asked, but participants and the researcher were allowed to make comments based on self-interests related to the topic (Morgan, 1998b). The idea was to create a warm environment where participants felt comfortable in sharing their experiences while being in the BTSP. Participant willingness to share experiences helped the researcher in evaluating the BTSP.

The focus group questions were sorted into five categories based on Krueger’s (1998) categories of questions for focus group interviews. The five categories were opening questions, introductory questions, transitioning questions, key questions, and ending questions. Each category was used to help increase participation. The opening question was a quick question that all participants could answer to help make the participants feel comfortable and help establish a sense of community among participants (Krueger, 1998). The introductory questions were open-ended questions that allowed

respondents to express their connectedness to the area being explored. For this study, the introductory question focused on overall perceptions of the BTSP. This question led to the transitioning questions, which focused on expressing participant perceptions of strengths and weaknesses with the BTSP. Next, the key questions of the focus group were asked. It was estimated that these questions would take the majority of the time to be discussed. These questions focused on specific components of the BTSP. Last, ending questions were posed to bring closure to the discussion. These questions included discussing what aspects of the BTSP were most impactful and suggestions to help improve the program.

For the focus group interview, the researcher expected a sample size of around five to nine participants. If the researcher received more willing participants, another focus group session would have been needed. If the researcher did not receive the intended number of participants, the researcher would reach out to the BT coordinators who make up the population and ask for assistance in helping to receive participation. After approximately one week, if there was still no more participation, the researcher would have conducted the focus group and the researcher would have included a small sample size as a limitation of the study. Once the researcher received consent from participants to take part in the focus group, the researcher analyzed the schools in which the participants currently worked and attempted to find a location near participants. If this had not been feasible, the researcher would have looked into conducting more than one interview in areas near participants. The location for the focus group took place at a public school building. The timing of the focus group meetings was in the early evening to allow for the teachers to leave work and tend to families or responsibilities outside of school. The researcher had assistance while conducting the focus group by dictating the

interview and ensuring that the meeting was audio/videotaped. Written notes for the focus group were taken in addition to the meeting being taped. The entire focus group discussion was transcribed.

Phase II also included a face-to-face interview with the BTSP coordinator for the southern region of Central County school district. Similar to the focus group interview, the researcher utilized Krueger's (1998) five categories of interviewing questions. The researcher contacted the region coordinator via email and asked for a meeting to conduct the interview. The researcher included a consent form for the coordinator. Upon acceptance to take part in the study, the researcher scheduled a time and place to conduct the meeting that was conducive to the schedule of the coordinator. The researcher suggested meeting at the coordinator's office or at the school of the researcher, and the interview was videotaped.

Phase III. Phase III of this study included interpreting findings in light of research questions used in the study (Creswell, 2014). According to Creswell (2014), when interpreting results, researchers considered whether the treatment that was implemented made a difference for the participants who experienced them. The researcher also determined the significance of the results drawing on the past literature that was reviewed and Vygotsky's ZPD theory. Last, the implications of the results for future research were discussed.

Data Analysis

The data analysis portion of this study consisted of two major parts, the quantitative analysis and the qualitative analysis. Each analysis contributed to answering the research questions of this study. "The two forms of data are integrated in the design analysis through merging the data" (Creswell, 2014, p. 217). Data from the surveys,

interview, and focus group were collected and disaggregated into themes. The analysis of data resulted in recommendations for future studies. Table 6 displays the research methods that were used for this study.

Table 6

Research Methods Table

Research Question	Tools/Instruments	Data Collection	Method of Analysis
1. What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview?	Surveys/Interviews	Surveys- Quantitative Interviews- Qualitative	Survey- Chi-Square Tests Interviews- Look for common themes
2. What is the impact of the BT program as measured by the teacher attrition rate for BTs?	Surveys/Interviews	Surveys- Quantitative Interviews- Qualitative	Survey-Mean, Median, Mode Interviews- Look for common themes
3. How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and BT coordinator interview?	Surveys/Focus Group/Interviews	Interviews- Qualitative	Interviews- Look for common themes

As illustrated in Table 6, the research questions of this study were answered by collecting data using surveys, focus group interviews, a face-to-face interview, and running chi-square tests. The researcher read over all responses to identify initial themes. Next, the researcher revisited the data to look for additional themes that may not have been discovered through the text analysis. The researcher ran chi-square tests to determine if there were significant relationships between two categorical variables.

Quantitative data. The quantitative survey data were analyzed using descriptive statistics discussed by Creswell (2014). The statistics included frequencies and measures of central tendency for each of the quantitative survey items. Chi-square tests were run to

compare different sets of categories and sections. As described by Fisher and Yates (n.d.), chi-square is a statistical test used to compare observed data with expected data. Chi-square tests were used to compare responses of BTs, mentors, and administrators. Emerging themes came from the qualitative data of the study. Trends were looked for across the varying populations using the quantitative data. Similarities and differences in the responses of the participant groups were analyzed.

Qualitative data. “Qualitative researchers collect data themselves through examining documents, observing behavior or interviewing participants” (Creswell, 2014, p. 185). For this study, the researcher conducted a face-to-face interview as well as a focus group. Qualitative data were transcribed for content analysis.

Creswell (2014) suggested organizing and preparing data for analysis. This analysis includes transcribing interviews, typing field notes, and sorting and arranging data into different types depending on the source of information. The researcher read all data to get a general sense of the information. Next, the information was coded. Coding was used to create categories and themes for analysis. In addition, the researcher explained the themes of the data to convey the findings. Last, the researcher interpreted the findings of the results.

Delimitations

Delimitations are boundaries set forth by the researcher (Creswell, 2014). One delimitation of this study was the sample used. The researcher only studied high school BTs in the district-assigned southern region. The results of this survey do not account for elementary and middle school BTs in the district nor any high school BTs who are employed outside of the southern region of the district. The researcher only included BTs for the 2017-2018 school year. Because of this decision, the results of the study will

be a snapshot of the BTs and not a historical reflection.

Limitations

Limitations were described by Creswell (2014) as uncontrollable influences on a study. One limitation of the study was the ability of BTs to convey their needs correctly. As teachers new to the profession, it might be difficult for a BT to accurately understand the things they do well in their classrooms or areas where they are in need of improvement. A second limitation was that the BT program encompasses teachers in their first, second, and third year of teaching. The data reported are not divided by year, so the results are not able to be reflected based on year of experience. A third limitation of the study was that the study solely relied on the respondents' understanding of the BTSP and their abilities to respond honestly, given the next limitation. A fourth limitation of this study included the school in which the researcher currently teaches was a part of the study. The fact that the researcher knew some of the study participants could have influenced participant responses. All precautions were taken to ensure the validity of this study by having consent from all participants. The researcher also established content validity for the instruments that were used in this survey with a third party content expert. A fifth limitation of the study was that it was isolated to a single region in a single district with local requirements for the BT program. Due to these limitations, this study may not be generalized to other settings or the district as a whole. A final limitation of this study was that the original author did not calculate the reliability and validity of the surveying instrument. Creswell stated that researchers should indicate the established validity and reliability of the scores of the instrument. Without these indicators, validity and reliability of the BT survey cannot be established.

Summary

The purpose of this study was to evaluate the district's BTSP to determine if the program was assisting in increasing teacher retention. This chapter summarized the techniques for the collection of data to analyze the BT program in the southern region of a school district. Multiple methods of data were collected from BTs, mentor teachers, administrators, and the BT coordinator through surveys, a focus group, and an interview to evaluate the program. Triangulation of data was analyzed from both quantitative and qualitative research methods.

Chapter 4: Results

Introduction

The purpose of this research study was to evaluate the effectiveness of the existing BTSP in the southern region of Central County. Both quantitative and qualitative data were used to analyze the program. The data collected for this study were gathered in a variety of ways: surveys distributed in the southern region of the district to high school BTs, mentor teachers, and the administrative representative in charge of the BT program at each of the 10 high schools. A focus group discussion with BTs was also conducted, along with a personal interview with the BTSP coordinator for the southern region of the district. This chapter provides the quantitative results of survey responses from BTs, mentor teachers, and administrators as well as the qualitative data from focus group interview question responses, open-ended survey question responses, and a face-to-face interview.

Research Questions

The following research questions guided this study:

1. What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview?
2. What is the impact of the BT program as measured by the teacher attrition rate for BTs?
3. How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and the BT coordinator interview?

Responses to the items and questions and an analysis of the data are shared in this

chapter.

Methods and Procedures

BTs, mentor teachers, and administrators in the 10 high schools of the southern region of the district were given a survey to gauge perceptions of the district's BT program. Chi-square tests were utilized to test for independence in the survey responses and triangulate the data analysis. The expected response, or theoretical positive response, was compared to the observed outcome to produce a chi statistic value. Statistical significance is based on a comparison of the chi statistic value and the critical value (Creswell, 2014) and indicates whether the responses are dependent or independent.

A focus group with BTs was conducted to critique the effectiveness of the district's BTSP further. The focus group was conducted on June 8, 2018. The discussion began with a brief description of the study. The researcher reminded participants that the session would be recorded but that there would be complete anonymity for participants. A total of seven BTs participated in the focus group. The focus group lasted approximately 90 minutes. All of the BT focus group participants were from the same school. The focus group was held in a classroom at the school where the focus group participants worked.

An interview with the BT coordinator for the region was conducted to discuss the advantages and disadvantages of the district's BTSP in helping to reduce the attrition rate of BTs. The interview was conducted on June 29, 2018. The discussion began with a brief description of the study. The interview lasted approximately 90 minutes. The interview was conducted via videoconferencing.

Study Participants

After receiving district approval, surveys for this study were emailed to all BTs,

mentor teachers, and administrative representatives in the 10 high schools that comprise the southern region of the district by the researcher. Each of the stakeholder groups of the study received a separate email. The expected response rate for this study using Fowler's (2009) table was approximately 169 participants, or 50% of the population. Table 7 illustrates the total number of people emailed and the number of survey respondents.

Table 7

Survey Participation

Groups	Total	Participants after First Email	Participants after Second Email	Total Participants
BTs	129	21	19	40
Mentor Teachers	95	30	17	47
Administrators	10	1	3	4

The researcher sent an initial email to all of the high school BTs, mentor teachers, and administrators in the southern region of the district. After 1 week, the researcher assessed the number of participants for each subgroup. After 1 week, a total of 21 BTs responded to the survey, 30 mentor teachers responded, and only one administrator participated in the survey. The researcher sent out a second email after the first week in an attempt to get more participation. The researcher assessed the number of participants after sending out the second email. Of the total population, 129 BTs were identified. Of the 129 BTs, 40 (31%) BTs responded to the survey. Of the 95 mentor teachers identified, 47 (49%) mentor teachers responded to the survey. Of the 10 administrative representatives identified, four (40%) responded to the survey.

Subgroup Participant Demographic Information

Demographic information was based on the survey responses for each subgroup of stakeholders. Demographic information pertaining to BTs included the year in the BT

program, lateral entry status, and whether they planned to return to teaching during the 2018-2019 school year. The mentor demographic information included lateral entry status and mentor teacher experience. The administrative demographic information included teaching experience, administrative experience, and the number of BTs employed at each school during the 2017-2018 school year.

BT Demographic Information

BT demographic information was analyzed based on the responses given by the BTs in beginning of the survey. The year in the BT process was analyzed, in addition to whether the BT was also a lateral entry teacher and if there was a plan to return to the profession during the 2018-2019 school year. Tables 8 and 9 illustrate the results of the demographic factors including BT year and lateral entry teacher information.

Table 8

BT Year

BT Year	Percentage
Year 1	27.5
Year 2	20.0
Year 3	52.5

Table 8 demonstrates the results of the BT survey administered to all BTs in the southern region of the district. Of the respondents to the survey, 27.5% were in their first year of teaching. Year 2 BTs were the least represented in the survey, with only 20%. Approximately 52.5% of all of the BT respondents were in their third year of the BT program.

Once the BT status of the study participants was determined, the researcher investigated the percentage of lateral entry teachers was observed. Table 9 illustrates the breakdown of lateral entry teachers among the BTs who participated in the study.

Table 9

Lateral Entry BTs

Lateral Entry	Percentage
Yes	22.5
No	77.5

An item on the BT survey asked BTs their lateral entry status. Of the respondents, 22.5% stated that they were lateral entry teachers. In addition to the lateral entry status, BTs were also asked about their intent to return to teaching during the 2018-2019 school year. Table 10 reflects the results of this item on the survey.

Table 10

Return to Teaching, 2018-2019

Response	Percentage
Yes – in the district	92.5
Yes – in another district	7.5
No	0
Unsure	0

BTs were asked if they planned to return to teaching for the upcoming school year. Of the total respondents, 92.5% stated they planned to return to teaching and in the same school district. Approximately 7.5% of BTs stated they planned to return to teaching for the upcoming school year but in another district. Response selections of “no” and “unsure” did not receive any responses. A focus group was conducted with BTs. Table 11 reflects the status of the teachers who participated.

Table 11

BT Focus Group Status

BT	Year in the BT Program
1	1
2	3
3	1
4	3

5	1.5
6	1
7	3

The majority of the BTs who participated in the focus group were in the first year of the BT program. One BT initially started teaching during the second semester of the school year. This mid-year placement places this BT in the category of having more than 1 year of teaching experience but less than 2 years. None of the focus group participants were in the second year of the BT program.

Finally, an interview was conducted with the BTSP coordinator on June 29, 2018. The one-on-one interview lasted approximately 90 minutes. The purpose of the interview was to get the opinions of the BTSP coordinator on how the district was meeting the needs of BTs and the goals of the BT program.

Mentor Teacher Demographic Information

Mentor teachers were asked demographic questions on the mentor survey that was administered for this study. The items included information regarding lateral entry status and years of experience. Tables 12 and 13 display the results of the demographic items of this survey.

Table 12

Lateral Entry Mentors

Lateral Entry	Percentage
Yes	10.6
No	89.4

One item on the mentor teacher survey was whether the mentor teachers were lateral entry teachers. Of the respondents, 10.6% stated they were a lateral entry teacher. Of the respondents, 89.4% stated they were not a lateral entry teacher, while 11% of all respondents were lateral entry mentor teachers; however, roughly 22% of the BTs represented in the study were lateral entry teachers. In addition to the lateral entry status, mentor teachers were asked how many years of teaching experience they had. Table 13 reflects the results of this item on the survey.

Table 13

Mentor Teacher Experience

Years of Experience	Percentage
5-10	17
11-15	27.7
16-20	27.7
20+	27.7

The years of experience on the mentor survey were broken down into 5-year increments. Of the 47 mentor teachers who participated in the survey, 17% of them had 5-10 years of teaching experience. The remaining years were evenly split with 27.7% of the participants representing each year increment. The following description will represent the demographic information for the administrators who participated in the study.

Administrator Demographic Information

The administrators in charge of the BT program at the 10 high schools were

surveyed about the demographic information. The items included information in regard to the years of teaching and administrative experience they possessed and the number of BTs employed at their school during the 2017-2018 school year. Tables 14 through 16 display the results of these survey items.

Table 14

Administrative Teaching Experience

Years of Experience	Percentage
5-10	75
11-19	0
20+	25

Table 14 illustrates the years of teaching experience held by the administrators who took the survey. In total, 75% of the respondents had 5-10 years of teaching experience, while 25% had over 20 years of teaching experience. No one who responded to the survey had 11-19 years of teaching experience. The next item in the survey asked for the years of administrative experience. Table 15 illustrates the results of this survey item.

Table 15

Administrative Experience

Years of Experience	Percentage
1-5	25
6-10	0
11-15	0
16-19	25
20+	50

Approximately 25% of the respondents had 1-5 years of administrative experience. None of the respondents had 6-15 years of administrative experience. Approximately 25% had 16-19 years of administrative experience, and 50% had 20 or more years of administrative experience. The results of the data imply that the

administrators who participated in this study were either fairly new to the field or were veteran administrators. Few were in the middle of the career as an administrator. The last survey item in this section asked for the administrator to report the number of BTs in their individual school. Table 16 represents the results of this survey item.

Table 16

BTs in the Schools

Number of BTs in the School	Percentage
1-5	25
6-10	0
11-14	25
15+	50

Of the responses to this survey item, 25% of the administrators reported having one to five BTs on staff during the 2017-2018 school year. None of the respondents reported having six to 10 BTs. Approximately 25% of the population had 11-14 BTs. Approximately 50% of the schools that participated in the survey had a minimum of 15 BTs for the 2017-2018 school year.

BT Challenges

Another section of the BT survey asked respondents to rate what areas of teaching were most challenging. The answer options ranged from 1=not at all, 2= somewhat challenging, 3=challenging, and 4=very challenging. Table 17 showcases the survey items for BTs and the frequency of BT responses based on the 4-point Likert scale.

Table 17

BT Challenges

Area of Teaching	Likert -Scale Frequency			
	Not at all Challenging	Somewhat Challenging	Challenging	Very Challenging
Additional clerical work/responsibilities	12	14	11	3
Assessing student work	14	17	9	0
Awareness of school policies and rules	16	14	11	0
Building relationships with other teachers	21	11	6	2
Building relationships with principal and/or administrators	18	13	7	2
Classroom discipline	8	16	14	2
Classroom management	10	16	12	2
Dealing with difficult students	5	24	14	1
Determining student learning levels of students	7	10	10	2
Effective use of different teaching methods and strategies	9	21	10	0
Getting materials, supplies and other educational resources	17	10	10	4
Having adequate time to prepare	6	12	13	9
Interaction with parents and guardians	6	8	3	2
Knowledge of subject matter	27	10	3	0
Motivating students	8	16	13	4
Obtaining guidance and support	23	10	6	1
Planning lessons and activities	14	21	5	0
Time management	15	14	10	1
Working with slow learners	15	15	6	4
Working with students of different ethnic and cultural backgrounds	22	6	10	2

The data set represented above showcases the frequency of responses for BTs on the survey items regarding BT challenges. Most BTs reported not having challenges in

the areas of teaching mentioned above, or BTs found these areas to be somewhat challenging. Obtaining guidance and support and working with students with different ethnic and cultural backgrounds were the areas of teaching that were deemed the least challenging. Areas that BTs deemed as challenging included having adequate time to prepare, classroom discipline, and dealing with difficult students.

Research Question 1: What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview? To answer this question, the surveys were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed. Due to the small sample size of categories on the Likert scale for the mentor survey items, categories were combined. The categories were combined to include not at all challenging and somewhat challenging into one category and challenging and very challenging into another category grouped together. Due to the small sample size for the principal subgroup, a chi-square test was not run on this population. The tables related to the principal data will reflect the frequency of responses on the Likert scale for each survey item. BT subgroups are broken down on the tables by BT1/2 which indicates BTs in their first and second year of teaching and BT3 which indicates BTs in their third year of teaching. Table 18 displays the analysis of the data pertaining to BT professional development for BTs.

Table 18

BT Professional Development, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2	BT 3
				n=19	n=21
How effective did you find the following program components?	Not at all	4.4	4.6	2.0	7.0
	Sw Challenging	12.7	13.3	14.0	12.0
	Challenging	2.9	3.1	3.0	2.0
	Very Challenging	0.0	0.0	0.0	0.0
					Chi-Square Statistic 0.36

The chi-square test was run with one degree of freedom and an alpha level of 0.05. A chi statistic is a number that tells how much difference exists between observed counts and expected counts. The chi statistic value is compared to the critical value from a chi-square table. If the chi statistic is larger than the critical value, there is a significant difference. If the chi statistic is less than the critical value, there is not a significant difference. The chi statistic had a value of 0.36 which was less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, five (13%) of the BTs surveyed reported that BT professional development was challenging.

Table 19 represents the responses of mentors and principals recognizing BT professional development as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 19

BT Professional Development, Mentor

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	13.7	14.3	13.0	15.0
	Challenging/Very Challenging	9.3	9.7	10.0	9.0
					Chi-Square Statistic 0.17

Due to the small sample in the categories for the mentor survey, survey items were combined to run the chi-square test. Not at all and somewhat challenging categories were combined, and challenging and very challenging were combined. In regard to BT professional development, 13 mentor teachers with 5-15 years of experience reported this survey item as being somewhat challenging or not challenging at all to BTs. In contrast, 12 mentor teachers with 5-15 years of experience reported BT professional development as challenging or very challenging. Approximately 15 mentor teachers with at least 16 years of experience reported that BT professional development was somewhat challenging or not challenging at all, while 11 experienced mentor teachers reported that BT professional development was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.17 which was less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 23 (49%) of the mentor teachers surveyed reported that BT professional development was challenging or very challenging.

Table 20 represents the response of principals on the survey item related to BT professional development.

Table 20

BT Professional Development, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	4
Very Challenging	0

Of the principals who participated in the survey, all four reported BT professional development as challenging.

Table 21 represents the response of BTs recognizing collaborating with other teachers as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 21

Collaborating with Others, BT

Item	Categories	Expected Response		BT Response		
		BT 1-2	BT 3	BT 1-2 n= 20	BT 3 n=21	
How effective did you find the following program components?	Not at all	2.93	3.07	2	4	Chi-Square Statistic 1.48
	Sw Challenging	4.88	5.12	3	7	
	Challenging	7.80	8.20	9	7	
	Very Challenging	4.39	4.61	6	3	

In regard to collaborating with other BTs, the majority of BTs with 1-2 years of experience reported this survey item as being challenging. In contrast, BTs in their third year were split in terms of collaborating with other BTs. Approximately 11 third-year BTs did not find collaborating with other BTs as challenging, but 10 third-year BTs did

find collaborating to be challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 1.48, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 24 (60%) of the BTs surveyed reported that collaborating with other teachers was challenging or very challenging.

Table 22 represents the responses of mentors recognizing collaborating with other teachers as an effective component of the district's BT program. The mentor and responses were compared to the positive theoretical response.

Table 22

Collaborating with Others, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=25	16+ n=26
How effective did you find the following program components?	Not at all/Sw Challenging	8.3	8.7	4.0	13.0
	Challenging/Very Challenging	16.7	17.3	21.0	13.0
					Chi-Square Statistic 6.63*

*Statistically significant chi-square statistic value.

In regard to collaborating with others, four mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to BTs. In contrast, 19 mentor teachers with 5-15 years of experience reported collaborating with others as challenging or very challenging. Approximately 13 mentor teachers with at least 16 years of experience reported that collaborating with others was somewhat challenging or not challenging at all, while 11 experienced mentor teachers reported that collaborating with others was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 6.63, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the job responsibilities of those surveyed.

Table 23 represents the response of principals on the survey item related to collaborating with other mentors.

Table 23

Collaborating with Other Mentors, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	1
Very Challenging	3

Of the principals who participated in the survey, one reported that BTs collaborating with other mentors was challenging. The remaining principal participants reported that collaborating with other mentors was very challenging.

Table 24 represents the responses of BTs recognizing co-teaching with a mentor as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 24

Co-teaching with Mentor, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the	Not at all	14.15	14.85	12	17
	Sw Challenging	3.41	3.59	5	2

following program components?	Challenging	1.46	1.54	2	1	Chi-Square Statistic 0.19
	Very Challenging	0.98	1.02	1	1	

In regard to co-teaching with a mentor, the majority of BTs with 1-2 years of experience reported co-teaching with a mentor was somewhat challenging or not challenging at all. Third-year BTs also reported co-teaching with a mentor was somewhat challenging or not challenging. Only two (5%) BTs reported co-teaching with a mentor was challenging, and two (5%) BTs indicated that co-teaching with a mentor was very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.19 which was less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. Responses from the focus group interview conducted included “I did not have the opportunity to co-teach with my mentor.” This could be a possible explanation for co-teaching not being significant for BTs.

Table 25 represents the responses of mentors recognizing co-teaching with a mentor as an effective component of the district’s BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 25

Co-teaching with Mentor, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the	Not at all/Sw Challenging	19.1	19.9	18.0	21.0

following program components?	Challenging/Very Challenging	3.9	4.1	5.0	3.0	
						Chi-Square Statistic 2.19

In regard to co-teaching with mentors, 18 mentor teachers with 5-15 years of experience indicated that co-teaching with a mentor was only somewhat challenging or not at all challenging. In contrast, 21 mentor teachers with 5-15 years of experience reported co-teaching with a mentor as challenging or very challenging. Approximately 15 mentor teachers with at least 16 years of experience reported that co-teaching with a mentor was only somewhat challenging or not challenging at all, while three experienced mentor teachers reported that co-teaching with a mentor was only somewhat challenging or not challenging at all.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.19, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 24 (51%) of the mentor teachers surveyed reported that co-teaching with a mentor teacher was challenging or very challenging.

Table 26 represents the response of principals on the survey item related to co-teaching with mentors.

Table 26

Co-teaching with Mentors, Principals

Categories	Frequency
Not at all	1
Sw Challenging	0
Challenging	2
Very Challenging	1

Of the four principals who participated in this survey, one principal reported that BTs co-teaching with mentors was not challenging. The other three principal participants reported that BTs co-teaching with mentors was challenging or very challenging.

Table 27 represents the responses of BTs recognizing data analysis with a mentor or colleagues as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 27

Data Analysis with Mentor or Colleagues, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	6.8	7.2	6.0	8.0
	Sw Challenging	7.8	8.2	8.0	8.0
	Challenging	5.4	5.6	6.0	5.0
	Very Challenging	0.0	0.0	0.0	0.0
					Chi-Square Statistic 0.02

In regard to data analysis with mentors or colleagues, the majority of BTs with 1-2 years of experience reported this survey item as not challenging. The majority of third-year BTs also marked this survey item as not being challenging. None of the BTs reported data analysis with a mentor or colleague as very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.02, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 10 (5%) of the BTs surveyed reported that data analysis with a mentor or colleagues was challenging or very challenging.

Table 28 represents the responses of mentors recognizing data analysis with a mentor or colleagues as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 28

Data Analysis with Mentor or Colleagues, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	13.7	14.3	6.0	22.0
	Challenging/Very Challenging	9.3	9.7	17.0	2.0
Chi-Square Statistic 18.91*					

*Statistically significant chi-square statistic value.

In regard to data analysis with a mentor or colleague, six mentor teachers with 5-15 years of experience reported this survey item as being somewhat challenging or not challenging at all to BTs. In contrast, 17 mentor teachers with 5-15 years of experience reported data analysis with a mentor or colleague as challenging or very challenging. Approximately 22 mentor teachers with at least 16 years of experience reported that data analysis with a mentor or colleague was somewhat challenging or not challenging at all, while two experienced mentor teachers reported that data analysis with a mentor or colleague was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 18.91, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the job responsibilities of those surveyed. While the data indicated no significant statistical differences in the responses,

19 (40%) of the mentor teachers reported that data analysis with a mentor or colleague as challenging.

Table 29 represents the response of principals on the survey item related to data analysis with a mentor or colleagues.

Table 29

Data Analysis with Mentor or Colleagues, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	3
Very Challenging	1

Of the four principals who participated in this survey, three principals reported that BTs co-teaching with mentors was challenging. The other principal participant reported that BTs co-teaching with mentors was very challenging.

Table 30 represents the responses of BTs recognizing establishing professional teaching goals with a mentor as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 30

Establishing Professional Teaching Goals with Mentor, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2	BT 3
				n=20	n=21
How effective did you find the following program components?	Not at all	4.9	5.1	3.0	7
	Sw Challenging	6.3	6.7	5.0	8
	Challenging	5.4	65.6	8.0	3
	Very Challenging	3.4	3.6	4.0	3
					Chi-Square Statistic 3.51

In regard to establishing professional teaching goals with a mentor, the majority

of BTs with 1-2 years of experience reported this survey item as challenging. In contrast, the majority of BTs in their third year reported this survey item as not very challenging. Approximately 15 third-year BTs did not find establishing professional teaching goals with a mentor as challenging, but six third-year BTs did report establishing professional teaching goals with a mentor as challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 3.51 which is less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, it is important to mention that 17 or 43% of the BTs surveyed reported that establishing professional teaching goals with a mentor teacher was challenging or very challenging.

Table 31 represents the responses of mentors recognizing establishing professional teaching goals with a mentor as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 31

Establishing Professional Teaching Goals with Mentor, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	8.3	8.7	7.0	10.0
	Challenging/Very Challenging	14.7	15.3	16.0	14.0
					Chi-Square Statistic 0.63

In regard to establishing professional teaching goals with a mentor, seven mentor

teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging at all to BTs. In contrast, 16 mentor teachers with 5-15 years of experience reported establishing professional teaching goals with a mentor as challenging or very challenging. Approximately 10 mentor teachers with at least 16 years of experience reported that establishing professional teaching goals with a mentor was somewhat challenging or not challenging, while 14 experienced mentor teachers reported that establishing professional teaching goals with a mentor was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.63, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 30 (64%) of the mentor teachers surveyed reported that establishing professional teaching goals with a mentor was challenging or very challenging.

Table 32 represents the response of principals on the survey item related to establishing professional teaching goals with a mentor.

Table 32

Establishing Professional Teaching Goals with a Mentor, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	2
Very Challenging	2

Of the four principals who participated in this survey, two principals reported that establishing professional teaching goals with a mentor was challenging. The other

principal participants reported that establishing professional teaching goals with a mentor was very challenging.

Table 33 represents the responses of BTs recognizing having a veteran mentor as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 33

Having a Veteran Mentor, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	4.4	4.6	1.0	8.0
	Sw Challenging	3.4	3.6	3.0	4.0
	Challenging	3.9	4.1	4.0	4.0
	Very Challenging	8.3	8.7	12.0	5.0
					Chi-Square Statistic 5.41*

*Statistically significant chi-square statistic value

In regard to having a veteran mentor, the majority of BTs with 1-2 years of experience reported this survey item as being challenging. In contrast, BTs in their third year reported having a veteran mentor as not challenging. Approximately 24 (60%) BTs reported having a veteran mentor as challenging. Approximately 17 (43%) BTs indicated having a veteran mentor as very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 5.41, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the experience level of those surveyed.

Table 34 represents the responses of mentors recognizing having a veteran mentor as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 34

Having a Veteran Mentor, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	8.3	8.7	4.0	13.0
	Challenging/Very Challenging	14.7	15.3	19.0	11.0
					Chi-Square Statistic 2.19

In regard to having a veteran mentor, two mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging at all to BTs. In contrast, 21 mentor teachers with 5-15 years of experience reported having a veteran mentor as challenging or very challenging. Approximately six mentor teachers with at least 16 years of experience reported that having a veteran mentor as somewhat challenging or not challenging at all, while 18 experienced mentor teachers reported having a veteran mentor was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.19, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, it is important to mention that 39 (83%) of the mentor teachers reported that having a veteran mentor teacher was challenging.

Table 35 represents the response of principals on the survey item related to having a veteran mentor.

Table 35

Having a Veteran Mentor, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	2
Very Challenging	2

Of the four principals who participated in this survey, two principals reported that having a veteran teacher was challenging. The other two principal participants reported that having a veteran teacher was very challenging.

Table 36 represents the responses of BTs recognizing lesson unit planning as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 36

Lesson Unit Planning, BTs

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=20
How effective did you find the following program components?	Not at all	7.8	8.2	5.0	11.0
	Sw Challenging	4.9	5.1	5.0	5.0
	Challenging	5.4	5.6	6.0	4.0
	Very Challenging	2.0	2.0	4.0	0.0
				Chi-Square Statistic 2.43	

In regard to lesson unit planning, there was a split among BTs with 1-2 years of experience on the difficulty of lesson unit planning. There was a total of 10 first- and second-year BTs who reported that lesson unit planning was somewhat challenging or not challenging at all, and 10 first- and second-year BTs reported lesson unit planning as challenging or very challenging. In contrast, 16 third-year BTs reported that lesson unit planning was somewhat challenging or not challenging to BTs. Four third-year BTs

indicated that lesson unit planning was challenging, and no third-year BTs indicated that lesson unit planning was very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.43, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 14 (35%) of the BTs surveyed reported that lesson unit planning was challenging or very challenging.

Table 37 represents the responses of mentors lesson unit planning as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 37

Lesson Unit Planning, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=21
How effective did you find the following program components?	Not at all/Sw Challenging	14.6	13.4	12.0	16.0
	Challenging/Very Challenging	8.4	7.6	11.0	5.0
					Chi-Square Statistic 0.94

In regard to lesson unit planning, 12 mentor teachers with 5-15 years of experience reported this survey item was somewhat challenging or not challenging at all to BTs. In contrast, 11 mentor teachers with 5-15 years of experience reported lesson unit planning was challenging or very challenging. Approximately 16 mentor teachers with at least 16 years of experience reported that lesson unit planning was somewhat

challenging or not challenging at all, while five experienced mentor teachers reported that lesson unit planning was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.94, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 23 (49%) of the mentor teachers surveyed reported that lesson unit planning was challenging or very challenging.

Table 38 represents the response of principals on the survey item related to lesson unit planning.

Table 38

Lesson Unit Planning, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	2
Very Challenging	2

Of the four principals who participated in this survey, no principals reported that lesson unit planning was not challenging for BTs. There were also no principal responses for somewhat challenging; however, two principals reported that lesson unit planning was challenging for BTs. The other two principal participants reported that lesson unit planning was very challenging for BTs.

Table 39 represents the responses of mentors and principals recognizing lesson unit planning as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 39

Modeled Lessons, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	7.8	8.2	5.0	11
	Sw Challenging	5.9	6.1	6.0	6
	Challenging	3.9	4.1	5.0	3
	Very Challenging	2.4	2.6	4.0	1
				Chi-Square Statistic 2.53	

In regard to modeled lessons, the majority of BTs with 1-2 years of experience reported this survey item was somewhat challenging or not challenging at all. BTs in their third year also reported modeled lessons was somewhat challenging or not challenging at all. Approximately eight first- and second-year BTs reported modeled lessons was challenging or very challenging, while only four third-year BTs reported modeled lessons as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.53, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 12 (30%) of the BTs surveyed reported that having lessons be modeled was challenging or very challenging.

Table 40 represents the responses of mentor teachers recognizing modeled lessons as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 40

Modeled Lessons, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	14.7	15.3	12.0	18.0
	Challenging/Very Challenging	8.3	8.7	11.0	6.0
					Chi-Square Statistic 2.37

In regard to modeled lessons, 12 mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to BTs. In addition, 11 mentor teachers with 5-15 years of experience reported modeled lessons as challenging or very challenging. Approximately 18 mentor teachers with at least 16 years of experience reported that modeled lessons was somewhat challenging or not challenging at all, while six experienced mentor teachers reported that modeled lesson planning was challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.37, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 17 (36%) of the mentor teachers surveyed reported that having lessons be modeled was challenging or very challenging.

Table 41 represents the response of principals on the survey item related to modeled lesson planning.

Table 41

Modeled Lessons, Principals

Categories	Frequency
Not at all	1
Sw Challenging	0
Challenging	1
Very Challenging	2

Of the four principals who participated in this survey, one principal reported that modeled lessons were not challenging for BTs. There were no principal responses for somewhat challenging; however, one principal reported that modeled lessons was challenging for BTs. The other two principal participants reported that modeled lessons was very challenging for BTs.

Table 42 represents the responses of BTs recognizing new teacher orientation as an effective component of the district's BT program. The survey item responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 42

New Teacher Orientation, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	5.4	5.6	4.0	7
	Sw Challenging	9.3	9.7	8.0	11
	Challenging	3.9	4.1	6.0	2
	Very Challenging	1.5	1.5	2.0	1
					Chi-Square Statistic 3.87*

*Statistically significant chi-square statistic value.

In regard to new teacher orientation, the majority of BTs with 1-2 years of experience reported this survey item was somewhat challenging or not challenging. BTs in their third year also reported new teacher orientation as somewhat challenging or not challenging. Approximately eight first- and second-year BTs reported new teacher orientation as challenging or very challenging, while only three third-year BTs reported new teacher orientation as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 3.87, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the experience level of those surveyed.

Table 43 represents the responses of mentor teachers recognizing new teacher orientation as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 43

New Teacher Orientation, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	8.3	8.7	7.0	10.0
	Challenging/Very Challenging	14.7	15.3	16.0	14.0
					Chi-Square Statistic 0.63

In regard to new teacher orientation, seven mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging at all to BTs. In contrast, 16 mentor teachers with 5-15 years of experience reported new teacher orientation as challenging or very challenging. Approximately 10 mentor teachers with at least 16 years of experience reported that new teacher orientation was somewhat challenging or not challenging at all, while 14 experienced mentor teachers reported new teacher orientation as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.63, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 30 (64%) of the mentor teachers surveyed reported that new teacher orientation was challenging or very challenging.

Table 44 represents the response of principals on the survey item related to new teacher orientation.

Table 44

New Teacher Orientation, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0

Challenging	3
Very Challenging	1

Of the four principals who participated in this survey, no principal reported new teacher orientation as challenging for BTs. There were also no principal responses for somewhat challenging; however, three principals reported that new teacher orientation was challenging for BTs. One principal reported that new teacher orientation was very challenging for BTs.

Table 45 represents the responses of BTs recognizing observation and data collection by a mentor of my lessons as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 45

Observation and Data Collection by Mentor of My Lessons, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 N=21
How effective did you find the following program components?	Not at all	7.3	7.7	6.0	9
	Sw Challenging	6.3	6.7	6.0	7
	Challenging	3.9	4.1	5.0	3
	Very Challenging	2.4	2.6	3.0	2
					Chi-Square Statistic 0.81

In regard to observation and data collection by mentor of lessons, the majority of BTs with 1-2 years of experience reported this survey item as somewhat challenging or not challenging at all. BTs in their third year also reported observation and data collection by mentor of lessons as somewhat challenging or not challenging at all. Approximately seven first- and second-year BTs reported observation and data collection by mentor of lessons as challenging or very challenging, while only five third-year BTs

reported observation and data collection by mentor of lessons as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.81, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 12 (30%) of the BTs surveyed reported that observation and data collection of lessons by mentors was challenging or very challenging.

Table 46 represents the responses of mentors recognizing observations and data collection by a mentor of my lessons as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 46

Observation and Data Collection by Mentor of My Lessons, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	11.7	12.3	9.0	15.0
	Challenging/Very Challenging	11.3	11.7	14.0	9.0
					Chi-Square Statistic 2.41

In regard to observation and data collection by mentor of my lessons, nine mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to BTs. In contrast, 14 mentor teachers with 5-15 years of experience reported new teacher orient observation and data collection by mentor of my lessons as challenging or very challenging. Approximately 15 mentor teachers with at least 16 years of experience reported observation and data collection by mentor of my lessons was somewhat challenging or not challenging at all, while nine experienced mentor teachers reported observation and data collection by mentor of my lessons as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.41, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 23 (49%) of the mentor teachers surveyed reported that observation and data collection of lessons by mentors was challenging or very challenging.

Table 47 represents the response of principals on the survey item related to

observation and data collection of lessons by mentors.

Table 47

Observation and Data Collection of Lessons by Mentors, Principals

Categories	Frequency
Not at all	1
Sw Challenging	0
Challenging	1
Very Challenging	2

Of the four principals who participated in this survey, one principal reported that observation and data collection of lessons by mentors was not challenging for BTs.

There were no principal responses for somewhat challenging. There was one principal who reported that observation and data collection of lessons by mentors was challenging for BTs, while two principals reported that observation and data collection of lessons by mentors was very challenging for BTs.

Table 48 represents the responses of BTs recognizing observations of master/veteran teachers as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 48

Observations of Master/Veteran Teachers, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	5.9	6.1	3.0	9
	Sw Challenging	5.9	6.1	4.0	8
	Challenging	3.9	4.1	7.0	1
	Very Challenging	4.4	4.6	6.0	3
					Chi-Square Statistic 8.09*

*Statistically significant chi-square statistic value.

In regard to observations of master/veteran teachers, the majority of BTs with 1-2 years of experience reported this survey item as somewhat challenging or very challenging; however, BTs in their third year reported observations of master/veteran teachers as somewhat challenging or not challenging at all. Approximately 12 first- and second-year BTs reported observations of master/veteran teachers as challenging or very challenging, while only four third-year BTs reported observations of master/veteran teachers as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 8.09, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the experience level of those surveyed.

Table 49 represents the responses of mentors recognizing observations of master/veteran teachers as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 49

Observations of Master/Veteran Teachers, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	5.9	6.1	4.0	8.0
	Challenging/Very Challenging	17.1	17.9	19.0	16.0
					Chi-Square Statistic 1.55

In regard to observations of master/veteran teachers, four mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to BTs. In contrast, 19 mentor teachers with 5-15 years of experience reported observations of master/veteran teachers as challenging or very challenging. Approximately eight mentor teachers with at least 16 years of experience reported observations of master/veteran teachers was not challenging, while 16 experienced mentor teachers reported observations of master/veteran teachers as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 1.55, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 39 (74%) of the mentor teachers surveyed reported that observations of master/veteran teachers was challenging or very challenging.

Table 50 represents the response of principals on the survey item related to observation of master/veteran teachers.

Table 50

Observations of Master/Veteran Teachers, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	3
Very Challenging	1

Of the four principals who participated in this survey, no principal reported observations of master/veteran teachers as challenging for BTs. There were also no principal responses for somewhat challenging; however, three principals reported that observations of master/veteran teachers was challenging for BTs. One principal reported that observations of master/veteran teachers was very challenging for BTs.

Table 51 represents the responses of BTs recognizing outside professional development as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 51

Outside Professional Development, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	4.4	4.6	5.0	4
	Sw Challenging	8.8	9.2	8.0	10
	Challenging	3.9	4.1	5.0	3
	Very Challenging	2.9	3.1	2.0	4
				Chi-Square Statistic 0.05	

In regard to outside professional development, the majority of BTs with 1-2 years of experience reported this survey item as somewhat challenging or not challenging. BTs

in their third year also reported outside professional development as somewhat challenging or not challenging. Approximately seven first- and second-year BTs reported outside professional development as challenging or very challenging, and seven third-year BTs also reported outside professional development as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 0.05, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 14 (7%) of the BTs surveyed reported that outside professional development was challenging or very challenging.

Table 52 represents the responses of mentors recognizing outside professional development as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 52

Outside Professional Development, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=15
How effective did you find the following program components?	Not at all/Sw Challenging	15.7	16.3	13.0	10.0
	Challenging/Very Challenging	7.3	7.7	10.0	5.0
Chi-Square Statistic 2.42					

In regard to outside professional development, 13 mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to

BTs. In contrast, 10 mentor teachers with 5-15 years of experience reported outside professional development as challenging or very challenging. Approximately 19 mentor teachers with at least 16 years of experience reported outside professional development was somewhat challenging or not challenging, while five experienced mentor teachers reported outside professional development as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 2.42, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating a normal response distribution. While the data indicated no significant statistical differences in the responses, 15 (32%) of the mentor teachers surveyed reported that outside professional development was challenging or very challenging.

Table 53 represents the response of principals on the survey item related to outside professional development.

Table 53

Outside Professional Development, Principals

Categories	Frequency
Not at all	1
Somewhat Challenging	0
Challenging	3
Very Challenging	0

Of the four principals who participated in this survey, one principal reported outside professional development as challenging for BTs. There were no principal responses for somewhat challenging; however, three principals reported that outside professional development was challenging for BTs.

Table 54 represents the responses of BTs recognizing resources provided by the mentor as an effective component of the district's BT program. The survey responses

were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 54

Resources Provided by Mentor, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	5.4	5.6	4.0	7
	Sw Challenging	4.4	4.6	4.0	5
	Challenging	4.9	5.1	6.0	4
	Very Challenging	5.4	5.6	6.0	5
				Chi-Square Statistic 1.65	

In regard to resources provided by mentor, the majority of BTs with 1-2 years of experience reported this survey item as challenging or very challenging. BTs in their third year were split as to whether resources provided by mentor was challenging or very challenging. Approximately 12 first- and second-year BTs reported resources provided by mentor as challenging or very challenging, and nine third-year BTs reported resources provided by mentor as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 1.65, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 21 (53%) of the BTs surveyed reported that resources provided by mentors was challenging or very challenging.

Table 55 represents the responses of mentors recognizing resources provided by the mentor as an effective component of the district's BT program. The survey responses

were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 55

Resources Provided by Mentor, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	6.9	7.1	2.0	12.0
	Challenging/Very Challenging	16.1	16.9	21.0	12.0
					Chi-Square Statistic 9.32*

*Statistically significant chi-square statistic value.

In regard to resources provided by mentor, two mentor teachers with 5-15 years of experience reported this survey item as somewhat challenging or not challenging to BTs. In contrast, 21 mentor teachers with 5-15 years of experience reported resources provided by mentor as challenging or very challenging. Approximately 12 mentor teachers with at least 16 years of experience reported resources provided by mentor was somewhat challenging or not challenging, while 12 experienced mentor teachers reported resources provided by mentor as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 9.32, which was greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the job responsibilities of those surveyed.

Table 56 represents the response of principals on the survey item related to resources provided by mentor.

Table 56

Resources Provided by Mentor, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	4
Very Challenging	0

Of the four principals who participated in this survey, no principal reported resources provided by mentor as challenging for BTs. There were also no principal responses for somewhat challenging; however, all four principals reported that resources provided by mentor was challenging for BTs.

Table 57 represents the responses of BTs recognizing support by my administrator as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed.

Table 57

Support Provided by Administrator, BT

Item	Categories	Expected Response		BT Response	
		BT 1-2	BT 3	BT 1-2 n=20	BT 3 n=21
How effective did you find the following program components?	Not at all	1.5	1.5	0	3
	Sw Challenging	5.4	5.6	3	8
	Challenging	7.3	7.7	8	7
	Very Challenging	5.9	6.1	9	3
					Chi-Square Statistic 5.87*

*Statistically significant chi-square statistic value.

In regard to support provided by an administrator, the majority of BTs with 1-2 years of experience reported this survey item as challenging or very challenging. BTs in their third year were split on whether support provided by an administrator was

challenging or very challenging. Approximately 14 first- and second-year BTs reported support provided by an administrator as challenging, while 10 third-year BTs reported support provided by an administrator as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 5.87, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the experience level of those surveyed.

Table 58 represents the responses of mentors recognizing support provided by an administrator as an effective component of the district's BT program. The survey responses were analyzed using a chi-square test to determine if the responses were dependent or independent of the years of experience of those surveyed.

Table 58

Support Provided by Administrator, Mentors

Item	Categories	Expected Response		Mentor Response	
		5-15	16+	5-15 n=23	16+ n=24
How effective did you find the following program components?	Not at all/Sw Challenging	8.3	8.7	6.0	11.0
	Challenging/Very Challenging	14.7	15.3	17.0	13.0
					Chi-Square Statistic 1.92

In regard to support provided by an administrator, six mentor teachers with 5-15 years of experience reported this survey item was somewhat challenging or not challenging to BTs. In contrast, 17 mentor teachers with 5-15 years of experience reported support provided by an administrator as challenging or very challenging. Approximately 11 mentor teachers with at least 16 years of experience reported that

support provided by an administrator was not challenging, while 13 experienced mentor teachers reported support provided by an administrator as challenging or very challenging.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 1.92, less than the critical value of 3.84. The data indicated there was not a significant statistical difference in the responses, indicating an independent, normal response distribution. While the data indicated no significant statistical differences in the responses, 30 (64%) of the mentor teachers surveyed reported that support provided by administration was challenging or very challenging.

Table 59 represents the response of principals on the survey item related to support provided by administration.

Table 59

Support by Administration, Principals

Categories	Frequency
Not at all	0
Sw Challenging	0
Challenging	4
Very Challenging	0

Of the four principals who participated in this survey, no principal reported support provided by administration as challenging for BTs. There were also no principal responses for somewhat challenging; however, all four principals reported that support provided by administration was challenging for BTs.

An analysis of the chi-square tests and results were analyzed in this chapter. There was a mixture of statistically significant responses and statistically insignificant responses. A summary of the statistically significant responses from the chi-square tests used for Research Question 1 is represented below in Table 60.

Table 60

Research Question 1 Quantitative Results

Survey Item	Subgroup		Chi-Square
	BT	Mentor Admin	
Collaborating with other mentors		✓	6.63
Data analysis with mentor/colleagues		✓	18.91
Having a veteran mentor	✓		5.41
New teacher orientation	✓		3.87
Observations of master/veteran teachers	✓		8.09
Resources provided by mentors		✓	9.32
Support provided by administrators	✓		5.87

Based on the quantitative results of this study, BTs perceived having a veteran mentor, the BT new orientation, observations of master/veteran teachers, and support provided by administrators as important aspects of the district's BT program. Mentor teachers perceived collaborating with other mentors, data analysis with mentor/colleagues, and resources provided by mentors as important aspects of the district's BT program. In addition to quantitative data, qualitative data were also conducted to answer Research Question 1 through open-ended questions from the surveys, a focus group with BTs, and an interview with the BTSP coordinator.

Qualitative responses. The responses provided by open-ended survey responses, focus group participants, and an interview with the BTSP coordinator were recorded and common themes were analyzed. Table 61 displays the common themes that derived from the qualitative data collected.

Table 61

Research Question 1 Frequency of Themes

Theme developed	Frequency from survey	Frequency from focus group	Frequency from interview	Total frequency
BT program was a great resource for BTs	45	5	1	51

Having a mentor was beneficial	24	7	4	35
BT program allowed for building relationships	24	7	4	29
BT program is out-of-date	18	7	4	29

Based on the results of the qualitative data, four common themes emerged from Research Question 1. The common themes included the BTSP being a great resource for BTs, the program being out of date, a great tool for building relationships, and the importance of having a mentor teacher. The BT program being a great resource was one of the more frequent responses from the survey given to the subgroup participants. The BT coordinator described the BT program as a

state-mandated program for beginning teachers with less than four years of teaching experience. During the program, beginning teachers receive top of the line professional development to help with the demands of the teaching experience. In addition, they receive multi-layered support from having an on-site mentor, support from administrators, and central office supports. These resources help beginning teachers find their way and path as educators.

Numerous responses from the survey given to participants echoed the sentiment of having an on-site mentor as a very beneficial component to the BT program. One respondent stated, “My mentor is the best. I’ve learned so much from him. He is easy to talk to and I never feel like I’m bothering him.” Another respondent stated, “My mentor is awesome! She is constantly checking in on me to make sure that I am receiving all of the resources that I need. She makes me feel like she actually likes being a mentor.”

The second theme that emerged from Research Question 1 was the need to have

mentor teachers. One survey respondent reported that “building connections and talking with other mentors and getting resources from other teachers” was very helpful. Another respondent stated,

Having a mentor was 100% the most beneficial aspect of being a beginning teacher. She was someone who knew my subject matter, and I could approach and ask her about anything. She was always supportive but also extremely professional. She got me through the school year.

A mentor teacher stated that “having someone available for the mentee that is there specifically for them and doesn’t have another agenda” was beneficial to BTs. Another mentor teacher reported that “the most beneficial thing for new teachers is having someone to talk to about issues that come up such as classroom management, lesson flow, and finding resources.”

The third theme that emerged from Research Question 1 was relationships. One respondent stated, “Sharing experiences and asking questions to and with experienced teachers.” Another respondent stated, “Having someone just to sit and talk through challenges with. It helps to vocalize frustrations and receive support from people in a judgment-free zone.” A BT echoed this same sentiment by stating, “Networking and connecting with other BTs in the building, informal time together” (Teacher 2, personal communication, June 8, 2018). Another respondent stated that “Meeting friends outside of my content area. That allowed us to share experiences outside of our subject matter” was an influential aspect of the program. One administrator reported that “developing relationships and being there for anything they may need to discuss” was an important aspect of the BTSP.

The fourth theme that emerged from Research Question 1 was that the BT

program is out of date. One survey respondent reported,

The program appears to be similar to how it was when it was first created. What I mean is that, the education field is changing so quickly, yet it seems like the professional development and training is not catching up with the changes in our field.

Another respondent reported,

I feel like the BT program is good in theory, but when I go to the monthly meetings, the information that is presented is never about something that either interests me, or something that I feel I need to work on.

A third interviewee stated,

I think my situation is a little different. With being a special education teacher, I do not feel like the program is specifically designed to me and the needs of my students. I get that professional development can't always be geared towards one type, but special education never receives any type of support, specifically. It always appears to be for math and science. I don't need help in my classroom with differentiating instruction. I don't need help with using the latest web 2.0 tools. My students can't do those things. I think the program is fine as a whole, but I just wish that they would take other areas into consideration when planning and prepping for beginning teachers as a whole. (Teacher 4, personal communication, June 8, 2018)

Research Question 1 Results

Based on the quantitative results for Research Question 1, BTs, mentor teachers, administrators, and the BTSP coordinator perceive the district's BTSP as being effective in allowing BTs to collaborate with other mentors, analyzing data with mentors, having a

veteran mentor, the new teacher orientation, observing master/veteran teachers, the resources provided to BTs by mentors, and the support BTs receive from administration.

The results from the qualitative data collected report that the district's BT program is a valuable source for BTs. The main area where BTs benefit from the district's program mostly comes in the form of having a veteran mentor teacher on site. The professional development opportunities afforded to BTs is also beneficial. Building relationships between BTs, mentors, administrators, and other teachers and staff members was also considered to be beneficial to BTs. On the other hand, opinions were shared that the district's program might be somewhat out of date in the materials covered during monthly meetings and professional development.

The next section includes the results of the second research question. Results for the second research question were identified using quantitative and qualitative data. Quantitative data were analyzed and reported. Qualitative data were analyzed, and individual participant responses were included.

Research Question 2: What is the impact of the BT program as measured by the teacher attrition rate for BTs? To answer this question, the researcher used a trend analysis to compare the district's BT turnover rate for 2014-2015, 2015-2016, and 2016-2017 school years. The data for the 2017-2018 school year was not available at the time the research for this study was conducted. Table 62 illustrates the differences between the district's turnover rates for those 3 years.

Table 62

BT Turnover Rate

Year	Traditional Educators	Lateral Entry Educators	Overall
2014-2015	17.12%	18.40%	17.2%
2015-2016	15.74%	15.32%	15.7%

2016-2017	16.4%	19.14%	16.8%
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Table 62 displays the district’s BT turnover rates for the past 3 school years. The information was broken down by BTs who received traditional teaching training as “traditional educators,” and lateral entry teachers as “lateral entry educators.” The BT turnover rate decreased from the 2014-2015 school year to the 2015-2016 school year; however, the turnover rate increased from the 2015-2016 school year to the 2016-2017 school year. Lateral entry teachers had the highest turnover rate percentage during 2016-2017.

To answer this question, the researcher also used a trend analysis to compare the state’s attrition rate for 2014-2015, 2015-2016, and 2016-2017 school years. The data for the 2017-2018 school year was not available at the time the research for this study was conducted. Table 63 illustrates the differences between the district’s turnover rates for those 3 years.

Table 63

State’s Attrition Rate

Year	Percentage
2014-2015	14.84
2015-2016	9.04
2016-2017	8.70

Table 63 showcased the attrition rates for the past 3 school years for the state where this study took place. The attrition rate was the highest during the 2014-2105 school year, with a rate of approximately 15%. The attrition rate in this state reduced during the 2015-2016 and 2016-2017 school years.

To further answer Research Question 2, survey respondents were asked if they planned to return to teaching during the 2018-2019 school year. Table 64 displays the

results from this question.

Table 64

Teaching in 2018-2019

Response	Percentage
Yes	92.7
Yes- in another district	7.3
No	0

All of the BT survey respondents reported planning to return to the education field during the upcoming 2018-2019 school year. While the majority plan to return to work in the same school district, 7.3% plan to teach in another school district. None of the BTs surveyed made a claim of not returning to the teaching field for the next school year. According to responses from BTs, the data suggested BTs did not recognize the year in the BT program as having an impact on their return to the field for the upcoming school year.

During the interview with the beginning support coordinator, the coordinator (personal communication, June 29, 2018) commented,

The attrition rate of beginning teachers for the district is steady. The district administers a beginning teacher survey at the end of the year. Some of the items on the survey are focused on teacher turnover. The responses given for those who do not plan to return to the district for the next school year almost always are that they are moving out of the district and/or state, some are taking time off for maternity leave, etc. There are very few responses from those that take the survey that report not returning to the district, specifically because of a situation with the district. While we cannot say with 100% certainty that beginning teachers are not only staying in the profession, but also in the district because of the district's BTSP program, we would hope that teachers find it as a valuable resource and

assists in some matter to them being able to withstand the tasks that come with being an educator.

A chi-square test was also run on the item, “Overall, do you think participating in the BT program will influence your decision to remain a teacher?” Table 65 displays the results.

Table 65

Impact of BT Program on Teacher Retention

Categories	Expected Response		BT Response	
	1-2	3	1-2 n=20	3 n=20
Yes	8.0	8.0	12.0	3.0
No	13.0	13.0	8.0	17.0
				Chi-Square Statistic 4.47*

*Statistically significant chi-square statistic value.

The chi-square test was run with one degree of freedom and an alpha level of 0.05. The chi statistic had a value of 4.47, greater than the critical value of 3.84. The chi-square test indicated that the responses were not independent, and a statistically significant difference exists between the responses and the experience level of those surveyed.

The results indicate that while there was a slight increase in the teacher turnover rate (1.1%) during the 2016-2017 school year, the turnover rate has remained mostly constant, with less than a 2% difference during the last 3 school years in which data were reported. This is in stark contrast to the state’s attrition rate, with an approximately 6% difference in rates over the 3 school-year period reported. Of the BTs surveyed, 100% of the respondents stated that they planned to return to teaching during the 2018-2019 school year. In addition, more than 90% of the respondents reported planning to return to teaching in the same school district in which this study was conducted. The results from

the chi-square test revealed that there is a statistical significance of the impact of the district's BT program on BT retention.

The next section discusses the results received from Research Question 3. Research Question 3 addressed the effectiveness of each component of the district's BT program in supporting BTs. The results are listed below.

Research Question 3: How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and the BT coordinator interview? To answer Research Question 3, qualitative data were collected through open-ended responses on the BT, mentor, and principal surveys and an interview with the BT coordinator for the region. BTs, mentors, and principals were asked to identify which components in the BT program were most beneficial to enhancing/supporting the skills of BTs. Qualitative data analysis of the responses involved identifying patterns and themes related to the question. The responses were coded to assess common themes.

BT Responses

Open-ended responses from the BT survey and the focus group were coded to assess common themes. After analyzing and breaking down the responses into common themes by tallying responses, the researcher identified three themes among the BT responses identifying the most effective components of the district's BT program: having a mentor, meeting other BTs, and support. Table 66 displays the frequency for the themes discovered from the BT responses for Research Question 3.

Table 66

Frequency of Themes, BT Survey, and Focus Group

Theme Developed from BT Survey	Frequency
Having a mentor	19

Meeting other BTs	14
Feeling supported	11
Working in PLTs	7

The theme that emerged most from the BT open-ended question responses was that of having a veteran mentor. During discussion, the topic of having a veteran mentor to assist BTs appeared 19 times. The next theme that emerged from BTs was meeting other BTs. New teachers mentioned the importance of being able to collaborate with other new teachers who were going through the same process as them a total of 14 times. BTs expressed need for administrative support as being important. This theme emerged a total of 11 times. The last theme that emerged from BT open-ended responses and the focus group was the work of the professional learning teams (PLTs). This theme emerged seven times. Each of the themes is discussed below.

Having a mentor. BTs consistently mentioned having a mentor teacher as a beneficial component to the district’s BT program. This theme emerged a total of 19 times on the BT survey and during the focus group. The purpose of the mentor was to provide support to the BT. The support provided included assistance with lesson planning, classroom management, and self-reflection. One teacher referred to the mentor component of the program as “meeting with my mentor that I connected with was the most beneficial part.” Another teacher exclaimed,

Having a mentor was 100% the most beneficial aspect of being a beginning teacher. She was someone who knew my subject matter, and I could approach and ask her about anything. She was always supportive but also extremely professional. She got me through the school year.

The BTs liked having someone on campus who they could go to and discuss issues with. Those issues did not always have to be directly school related. Another teacher

commented, “The mentor was very open and welcoming. She always was willing to help at all times of the day!” Another participant responded, “Meeting with my mentor that I actually connected with was the most beneficial part.” The strength of having a mentor made a great impact on the BTs who participated in this research study. Another respondent reported, “Having someone just to sit and talk through challenges with. It helps to vocalize frustrations and receive support from people in a judgment-free zone.”

Meeting other BTs. The second theme that emerged as an effective component of the district’s BT program was meeting other BTs. This theme emerged 14 times. Meeting other BTs allowed for new teachers to have a sense of belonging. There were fellow new teachers going through the same process. BTs reported having an immediate alliance. One teacher stated the most beneficial component of the program was “making friends in the BT program who were in similar situations as me.” Another teacher suggested that “working with other BTs” as an integral part of the program. One respondent reported, “Discussing challenges and sharing ideas as a group in scheduled BT meetings” as the most important component of the district’s BT program. One teacher mentioned, “networking and connecting with other BTs in the building (informal time together)” was an important aspect of the BT program they found to be valuable.

Feeling supported. The third theme that emerged as an effective component of the district’s BT program was support. This theme emerged 11 times on the BT survey and during the focus group session. BTs stressed how important it was to receive support from each other, mentors, PLTs, and administration. One teacher mentioned, “The support given by the mentor and other teacher was beneficial.” Another teacher stated that “support with differentiation was instrumental as a beginning teacher.”

Working in PLTs. The fourth theme that emerged as an effective program

component of the district's BT program was the work of the PLTs. This theme emerged a total of seven times on the BT survey and during the focus group session. BTs commented on the importance of having someone in the same department with whom to collaborate. One teacher noted during the focus group session,

Having a PLT has been a life-changer for me. My mentor is not in the same discipline as me, so while he is a great mentor, he can't help me with subject matter, and sometimes I need help with that. Luckily, I have PLT members who are also veteran teachers, who can help me when I feel stuck, or feel like I'm running out of time to cover a chapter or a unit.

BTs found having a mentor, working and meeting with other BTs, receiving support, and working with PLTs to be beneficial aspects of the BT program. While there were other areas mentioned by BTs, the three categories mentioned above were the most prominent. Mentor teachers were also asked to express their opinions on the most beneficial aspects of the BT program. Those responses are included in the next section.

Mentor Teacher Responses

Open-ended responses from the mentor teacher survey were coded to assess common themes. After analyzing and breaking down the responses into common themes by tallying responses, the researcher identified three themes among the mentor teacher responses identifying the most effective components of the district's BT program: the mentor/mentee relationship, BT meetings, and observations. Table 67 displays the frequency for the themes discovered from the BT responses for Research Question 3.

Table 67

Frequency of Themes, Mentor Survey

Theme Developed from Mentor Survey	Frequency
Mentor/Mentee relationship	19

Having monthly BT meetings	10
Receiving observations	9

The theme that emerged the most from the open-ended questions on the mentor survey in terms of the best components of the district's BTSP was the mentor/mentee relationship. This theme emerged a total of 19 times. The second theme to emerge from the mentor survey was conducting BT meetings. This theme emerged 10 times. The last theme to emerge from the mentor survey was observations. This theme emerged nine times. Each of the themes is discussed below.

Mentor/mentee relationship. The first emerging theme from the open-ended question on the mentor survey was the mentor/mentee relationship. This theme was mentioned a total of 19 times. Mentors reported the importance of having a good working relationship with their mentee helped in the effectiveness of the program. One mentor stated that "meeting with them and just letting them know I was there for them" helped to build the relationship between the BT and the mentor. Another teacher reported, "I think the most beneficial thing for new teachers is having someone to talk to about issues that come up such as classroom management, lesson flow, and finding resources." Another mentor responded that having a "strong relationship with BT" was an important aspect of the district's program. One other mentor responded, "I think having a mentee that was in my department was most beneficial. I think if I had mentored a teacher outside of my department, I think they would have not benefited as much!" The next common theme was BT meetings.

Having monthly BT meetings. The second theme from the open-ended responses to the mentor survey was BT meetings. This theme was mentioned a total of 10 times. BT 1s and BT 2s are required to attend monthly BT meetings, scheduled by the on-site BT coordinator. One mentor stated that "the monthly meetings and the regular

BT/mentor meetings” were effective in helping BTs throughout the process. Another mentor stated that the most effective portion of the BT meetings was the meetings where BTs were able to focus on “problem-solving sessions and reflections during meetings rather than assignments and paperwork.” A mentor also responded that “weekly meetings and open communication” were integral parts to the BT program. The next common theme was observations.

Receiving observations. The third theme identified from the BT survey was observations. This theme was mentioned a total of nine times by mentor teachers in their qualitative survey responses. Mentors believed that BTs observing other teachers gave them more experience and allowed them to see different teaching styles. One mentor stated that “dialogue and observations with other teachers” helped BTs tremendously. Another mentor responded that “observing the beginning teacher” and being able to provide feedback was also instrumental.

Mentor teachers found the mentor/mentee relationship, BT meetings, and observations to be beneficial aspects of the BT program. While there were other areas mentioned by mentor teachers, the three categories mentioned above were the most prominent. Administrators were also asked to express their opinions on the most beneficial aspects of the BT program. Those responses are included in the next section.

Principal Responses

Open-ended responses from the principal survey were coded to assess common themes. After analyzing and breaking down the responses into common themes by tallying responses, the researcher identified two themes among the principal responses identifying the most effective components of the district’s BT program: interaction with other BTs and feedback from the administration. The frequency of themes for the

principal survey are listed below in Table 68.

Table 68

Frequency of Themes, Principal Survey

Theme developed from Principal Survey	Frequency
Interaction with other BTs	2
Feedback from Administration	2
Having an effective BT Coordinator	1
Receiving observations	1

The theme that emerged the most from the open-ended questions on the principal survey in terms of the best components of the district's BTSP was the interaction among BTs. This theme emerged a total of four times. The second theme to emerge from the principal survey was feedback from administration. This theme emerged two times. The third theme to emerge from the principal survey was the usefulness in having an effective BT coordinator. This theme emerged one time. The last theme to emerge from the principal survey was observations. This theme emerged one time. Each of the themes is discussed below.

Interaction with other BTs. The first theme that emerged from the principal survey was interaction with other BTs. This theme was mentioned two times. BT interaction was also a theme for BTs. One principal mentioned that BTs "having the opportunity to interact and reflect with other BTs was very helpful as I learned more about successful strategies they used." Another principal stated, "beginning teachers having the opportunity to bounce ideas off of one another and express their successes and failures is a great learning experience for all."

Feedback from administration. The second theme that emerged from the principal survey was feedback from the administration. This theme was mentioned two times. It is essential for BTs to know that everyone in the building supports them. One principal stated that "the feedback from administrators about classroom instruction and

my work with students was the most valuable for me.” The researcher also conducted an interview with the BT coordinator for the district in which the study occurred.

Having an effective BT coordinator. The third theme that emerged from the principal survey was having an effective BT coordinator. This theme was noted one time. The school BT coordinator serves as the ambassador between the BT and the district. It is imperative that he relays pertinent information from the district to BTs and addresses the needs and concerns of BTs, including making mention to district representatives, if necessary.

Receiving observations. The fourth theme that emerged from the principal survey was making observations. One principal mentioned,

Mentor teachers and administrators should be observing beginning teachers to provide adequate feedback. This feedback includes providing praise and constructive criticism. Beginning teachers should also be entering into the classrooms of other teachers to learn varying teaching styles and classroom discipline practices.

Principals found the interaction with other BTs, feedback from administration, an effective BT coordinator, and observations to be beneficial aspects of the BT program. The BT coordinator for the region was also asked to express their opinion on the most beneficial aspects of the BT program. Those responses are included in the next section.

BT Coordinator Response

An interview was conducted with the BT coordinator for the region of the district in which this study took place. The interview (Appendix E) consisted of the researcher asking the coordinator questions about the district’s BT program. The coordinator started off the interview by providing a synopsis of the district’s BT program. The program was

described as a 3-year, state-required program for all teachers new to the county with less than 3 years of teaching experience. After providing background information about the program, the interviewee discussed three BT program components that were most effective: resources, orientation, and an on-site mentor. The frequency of themes for the BT coordinator is listed below in Table 69.

Table 69

Frequency of Themes, BT Coordinator

Theme Developed from Interview	Frequency
Resources provided to BT	6
District Orientation	5
Having an On-site Mentor	5

Three themes emerged from the interview conducted with the BT coordinator for the region in which this study took place. The first theme that emerged from the interview was the resources provided to BTs by the district. The second theme that emerged from the interview was the new teacher orientation provided by the district for BTs. The third theme that emerged from the interview was the use of having on-site mentors at schools. Each of the themes is discussed below.

Resources provided to BTs. The first emerging them from the interview with the BT coordinator was the resources that the district provides for BTs. This theme was mentioned a total of six times. When asked about the resources provided to BTs through the district, the BT coordinator responded,

There are lots of resources that the district provides to beginning teachers throughout the year to ensure success. At orientation, BTs are provided information about benefits, instructions on how to use C-MAPP, NCEES, and mentor pairing just to name a few. Outside of orientation, BTs receive pertinent information about licensure. There are also weekly support meetings for BTs 1

and 2, and monthly support meetings for BT 3s. Some of the topics during these meetings include the evaluation process, webinars pertaining to the legal aspect of teaching, technology resources, and other professional development.

The next theme that emerged was the new hire orientation conducted by the district.

District orientation. The second emerging theme from the interview with the BT coordinator was the new teacher orientation. This theme was mentioned a total of five times. According to the BT coordinator, BTs attend three new teacher orientations.

Orientation is a major plus to the BT program. There is quite a bit of information that BTs need to know. Because of this, BTs actually complete three separate orientations. The first is through the human resources department. This orientation covers information about employee benefits, the rights of employees, and board policies. The second orientation is through the district's beginning teacher program. This orientation covers information about teaching and the classroom. New teachers learned about C-MAPP, NCEES, mentor pairing, and the expectations of beginning teachers. The third orientation is done in the school building. During this orientation, beginning teachers are introduced to the principal, office staff, the on-site beginning teacher coordinator, and their mentor.

The BT Coordinator went on to state,

The three orientations allow beginning teachers to have the layered support that the district recommends. The orientations really set the foundation on which beginning teachers are able to soar. This is by far one of the merits of the beginning teacher induction program.

The next theme that emerged from the BT coordinator interview was having an on-site mentor.

Having an on-site mentor. The third emerging theme from the interview with the BT coordinator was the on-site mentor. This theme was mentioned a total of five times.

When asked about the role of mentors, the BT coordinator responded,

Mentors go through an extensive training process. Once mentors are selected, the placement of mentors and mentees is decided upon by school administration and the on-site beginning teacher coordinator. The content area of the mentor is considered when placing with a mentee. While it was not a requirement, mentors being placed with a mentor in the same department is deemed beneficial. The only requirement was for special education mentees to be placed with a mentor in the same department.

The researcher asked the coordinator about the relationship between the mentor and mentee. The response provided was,

The on-site mentor serves as the mentees first-line of communication and support. The pair should attempt to form a positive relationship because they will be working closely with another. Two specific program requirements call for the mentor and mentee to meet weekly. During these meetings, the beginning teacher provides a self-reflection. Mentor teachers also observe the mentee and provide feedback about the observation. Due to the mentor requirements of the program, the mentor plays a critical role in the development of the beginning teacher. It's very important for the mentor and mentee to develop a positive relationship with one another.

The data from each subgroup of participants were reported. The subgroups of this research study included BTs, mentor teachers, principals, and the BT coordinator. There was overlap among the subgroups in terms of the most effective component to the BT

program. Table 70 reflects the results of all of the subgroup responses.

Table 70

Subgroup Themes

Theme Developed from Subgroups	Frequency
Having a Mentor	43
BT Networking	26
Being provided support	22
Receiving Observations	10
Feedback from Administration	2

Table 70 represents the common themes developed from the subgroups in this research study. The common themes were discovered after analyzing and tallying responses given from open-ended survey questions, a focus group meeting, and a one-on-one interview. BTs, mentor teachers, principals, and the BT coordinator believed that BTs having a mentor at the school level, the opportunity to network and communicate with one another, support, conducting observations and being observed, and feedback from administration were the most effective components of the district's BT program.

BTSP Goals

As mentioned in Chapter 3, the researcher aligned the BT survey items to the goals of the district's BTSP (Table 5). This alignment was used to evaluate the effectiveness of the district's BTSP. The BT survey was analyzed using a chi-square test to determine if the responses were dependent or independent of the experience level of those surveyed. The results of the BT survey items about the BTSP goals are reported below. Results from the BT focus group related to the BT goals are also reflected.

BTSP Goal 1: To help new teachers improve skills and become successful educators. The BT survey items that aligned with the BTSP goals asked BTs to answer questions about challenging areas on a likert scale from 1=not at all, 2=somewhat challenging, which will be represented below by the abbreviation "sw challenging,"

3=challenging, and 4=very challenging. The items that aligned with the first goal of the BTSP included awareness of school policies and rules, having adequate time to prepare, interaction with parents and guardians, knowledge of subject matter, and planning lessons and activities. A chi-square test was run for each survey item, comparing BTs in their first and second year to third-year BTs. Table 71 reflects the results of the first goal.

Table 71

Difference between BT 1-2 and BT 3 on Survey Items Aligned to BTSP Goal 1

Survey Item	Category	Expected Response		BT Response		Chi statistic
		1-2	3	1-2	3	
Awareness of school policies	Not at all	7.60	8.40	9	7	1.49
	Sw Challenging	5.70	6.30	4	8	
	Challenging	5.70	6.30	6	6	
	Very Challenging	0	0	0	0	
Having adequate time to prepare	Not at all	2.85	3.15	3	3	0.09
	Sw Challenging	5.7	6.3	6	6	
	Challenging	6.18	6.83	6	7	
	Very Challenging	4.28	4.73	4	5	
Interaction with parents and guardians	Not at all	5.23	5.78	6	5	2.94
	Sw Challenging	9.50	10.50	8	12	
	Challenging	3.33	3.68	3	4	
	Very Challenging	0.95	1.05	2	0	
Knowledge of subject matter	Not at all	12.83	14.18	10	17	5.13*
	Sw Challenging	4.75	5.25	6	4	
	Challenging	1.43	1.58	3	0	
	Very Challenging	0	0	0	0	
Planning lessons and activities	Not at all	6.65	7.35	6	8	0.43
	Sw Challenging	9.98	11.03	10	11	
	Challenging	2.38	2.63	3	2	
	Very Challenging	0	0	0	0	

*Statistically significant chi-square statistic value.

The chi-square tests were run with one degree of freedom and an alpha level of 0.05. The chi statistic for each item was less than the critical value of 3.84. A critical value is a point on the test distribution that is compared to the test statistic in order to determine dependence or independence among responses (Urdan, 2010). The critical value is a set number that is decided based upon the degrees of freedom for the variables used in a study. The data indicated there was no statistically significant difference in the responses of BTs, indicating a normal response distribution and independence among responses.

During the focus group interview, BTs reflected on the difficulty they experienced with having adequate time to prepare. Teacher 2 (personal communication, June 8, 2018) reported, “With the additional lunch duties that we have, it is hard to find time to prep for afternoon classes.” Teacher 6 (personal communication, June 8, 2018) responded,

While having PLT meetings during common planning time and also during lunch is helpful, sometimes I need that time to look over things either from the previous day, or for the next class period. There is not enough time to do it all and to do it well.

When asked if the BT program helped new teachers improve upon their skills and become successful educators, BTs had varying responses. Teacher 1 (personal communication, June 8, 2018) noted, “I think this is something that only time will tell. We’re still going through the process right now. Once we finish the program, I’m sure the answer will be obvious.” Teacher 3 (personal communication, June 8, 2018) shared the same sentiment, adding,

I agree with [teacher 1]. We are both first-year teachers, so that might be why we feel this way. It’s not that the program isn’t helping us hone in on our skills and become better teachers. We are just starting out and probably can’t tell right now.

The other teachers who participated in the focus group had a different opinion and believed the BT program did help to improve their skills and helped them to become better educators. Teacher 2 (personal communication, June 8, 2018) stated, “the professional development opportunities I have been provided with have been phenomenal. They have allowed me to try different things in the classroom and perfect my craft.” Teachers 4 and 6 also agreed that the BTSP was influential in helping to improve skills and becoming better educators.

The responses from the interview with the BT coordinator supported the idea that the district's BT program is designed to help BTs improve their skills and become successful educators.

The beginning teacher program of [the district] is designed to ensure that beginning teachers are able to build on the skills that they acquired through their educational program and student teaching. Beginning teachers are provided professional development opportunities and are paired with a veteran teacher who takes on the role of a mentor to assist the beginning teacher. These two variables will help beginning teachers improve their skills and become successful educators. (Anonymous, personal communication, June 29, 2018)

The coordinator felt certain that the district met the first goal of the BT program.

As stated earlier, the quantitative data indicated that there was no statistically significant difference in the responses given by BTs at different experience levels, in relation to district's first goal. Based on the results of the qualitative data from the BT focus group and the interview with the BTSP coordinator as well as the quantitative data from the survey, the BT program met the standards of Goal 1, to help BTs to improve.

BTSP Goal 2: Ensure that BTs meet the state's professional teaching standards. The BT survey items that aligned with the second goal of the BTSP included obtaining guidance and support, BT professional development, effective use of different teaching methods and strategies, motivating students, working with slow learners, and working with students of different ethnic and cultural backgrounds. A chi-square test was run for each item, comparing responses for BTs in their first and second year to third-year BTs. Table 72 reflects the results of the second goal.

Table 72

Difference between BT 1-2 and BT 3 on Survey Items Aligned to BTSP Goal 2

Survey Item	Category	Expected Response		BT Response		Chi statistic
		1-2	3	1-2	3	
Obtaining guidance and support	Not at all	10.93	12.08	13	10	2.90
	Sw Challenging	4.75	5.25	3	7	
	Challenging	2.85	3.15	3	3	
	Very Challenging	0.48	0.53	0	1	
Effective use of different teaching methods and strategies	Not at all	2.85	3.15	4	2	1.08
	Sw Challenging	10.45	11.55	10	12	
	Challenging	5.70	6.30	5	7	
	Very Challenging	0	0	0	0	
Motivating students	Not at all	3.80	4.20	2	6	3.49
	Sw Challenging	7.60	8.40	7	9	
	Challenging	5.70	6.30	7	5	
	Very Challenging	1.90	2.10	3	1	
Working with slow learners	Not at all	7.13	7.88	5	0	3.31
	Sw Challenging	7.13	7.88	7	8	
	Challenging	2.85	3.15	4	2	
	Very Challenging	1.90	2.10	3	1	
Working with students of different ethnic and cultural backgrounds	Not at all	10.45	11.55	11	11	1.90
	Sw Challenging	2.85	3.15	3	3	
	Challenging	4.75	5.25	5	5	
	Very Challenging	0.95	1.05	0	2	

The chi-square tests were run with one degree of freedom and an alpha level of 0.05. The chi statistic for each survey item was less than the critical value of 3.84. The data indicated there was not a statistically significant difference between the responses of BTs and the theoretical positive response. The data indicated there was no statistically significant difference in the responses of BTs, indicating a normal response distribution, independent of the BT experience year.

While not statistically significant, motivating students and working with slow learners received higher marks than the other topics reflected in Table 72. This denotes

that BTs overall did find these topics more challenging than others. Effective use of teaching strategies and working with students of various ethnic backgrounds were deemed the least challenging for BTs.

During the focus group interviews, Teacher 5 (personal communication, June 8, 2018) reported, “I believe the program meets this goal. I think completing the paperwork with my mentor and attending the meetings helps to meet this goal.” Teachers 1, 2, and 6 agreed with the statement of Teacher 1. Teachers 3 and 7 stated that the district’s BT program did meet the requirements of the second goal.

Having worked in a different district, in a different state in fact, [district] does a great job in ensuring that beginning teachers meet the state standards. You’re absolutely correct [teacher 5] that part of this goal is met through the work done with the mentors. The beginning teacher observations is what ensures that beginning teachers are satisfying the state standards. (Teacher 7, personal communication, June 8, 2018)

When the BT coordinator was asked if the district met the needs of Goal 2 of the BT program, the response was,

The district satisfies the goal of ensuring beginning teachers meet the state’s professional teaching standards by having mentors and the mentor coordinator at the school conduct observations. The goal of the observations is for beginning teachers to receive a score of proficient on each of the standards, which is the state standard. (Anonymous, personal communication, June 29, 2018)

The coordinator was certain that the district was meeting the second goal of the BT program.

Based on the quantitative results from the BT survey, there was no statistical

significance in the responses of BTs, indicating a normal response distribution. While there was a normal response distribution for this data set, this does not negate the fact that there might be some BTs who struggle with some of these topics and to meet the state's professional teaching standards. Based on the qualitative results from the BT focus group and the interview with the BTSP coordinator, the district did meet the needs of the BT program.

BTSP Goal 3: BTs impact the learning of all students in distinguished ways.

The BT survey items that aligned with the third goal of the BTSP included assessing student work, classroom discipline, classroom management, determining student learning levels, effective use of different teaching methods and strategies, motivating students, working with slow learners, and working with students of different ethnic and cultural backgrounds. A chi-square test was run for each item, comparing the responses of BTs in their first and second year to third-year BTs. Table 73 reflects the results of the third goal.

Table 73

Difference between BT 1-2 and BT 3 on Survey Items Aligned to BTSP Goal 3

Survey Item	Category	Expected Response		BT Response		Chi statistic
		1-2	3	1-2	3	
Assessing student work	Not at all	6.65	7.35	7	7	0.96
	Sw Challenging	8.08	8.93	9	8	
	Challenging	4.28	4.73	3	6	
	Very Challenging	0	0	0	0	
Classroom discipline	Not at all	3.80	4.20	4	4	6.49*
	Sw Challenging	7.60	8.40	4	12	
	Challenging	6.65	7.35	10	4	
	Very Challenging	0.95	1.05	1	1	
Classroom management	Not at all	4.75	5.25	3	7	1.21
	Sw Challenging	7.60	8.40	8	8	
	Challenging	5.70	6.30	6	6	
	Very Challenging	0.95	1.05	2	0	
Determining student learning levels	Not at all	3.33	3.68	2	5	2.02
	Sw Challenging	9.98	11.03	12	9	
	Challenging	4.75	5.25	4	6	
	Very Challenging	0.95	1.05	1	1	
Effective use of different teaching methods and strategies	Not at all	2.85	3.15	4	2	1.08
	Sw Challenging	10.45	11.55	10	12	
	Challenging	5.70	6.30	5	7	
	Very Challenging	0	0	0	0	
Motivating students	Not at all	3.80	4.20	2	6	3.49
	Sw Challenging	7.60	8.40	7	9	
	Challenging	5.70	6.30	7	5	
	Very Challenging	1.90	2.10	3	1	
Working with slow learners	Not at all	7.13	7.88	5	10	3.31
	Sw Challenging	7.13	7.88	7	8	
	Challenging	2.85	3.15	4	2	
	Very Challenging	1.90	2.10	3	1	
Working with students of different ethnic and cultural backgrounds	Not at all	10.45	11.55	11	11	1.90
	Sw Challenging	2.85	3.15	3	3	
	Challenging	4.75	5.25	5	5	
	Very Challenging	0.95	1.05	0	2	

*Statistically significant chi-square statistic value.

The chi-square tests were run with one degree of freedom and an alpha level of 0.05. The chi statistic for each survey item was less than the critical value of 3.84. The data indicated there was no statistically significant difference in the responses of BTs as compared to their experience level, indicating a normal and independent response

distribution.

While the data points were deemed not statistically significant, it is worth noting that BTs reported motivating students and working with slow learners as challenging based on the Likert scale. BTs reported determining student learning levels and effective use of different teaching methods and strategies as the least challenging based on the Likert scale. Approximately 28 (70%) BTs selected not at all or somewhat challenging for determining student learning levels and effective use of different teaching methods.

The focus group responses were very positive in terms of Goal 3. Teacher 2 (personal communication, June 8, 2018) stated,

All teachers have an impact on students. Some think that only veteran teachers, with their experience, can have a meaningful impact on students. That's just not true. I believe that as a new teacher, I bring about a different way of reaching students. In some ways, I can relate to my students better than an older, more experienced teacher.

Teacher 6 (personal communication, June 8, 2018) stated,

I can think of several ways that I impact the learning of students. I try to use every minute in class to be a teachable moment for my students. We discuss varying topics that I believe has an impact on their learning. For instance, I talk to my students about proper emailing etiquette, how to cite sources properly, as well as provide students with updates on their classroom performance. I think that all of this has an impact on their learning.

In the interview with the BT coordinator, it was reflected that the BT program emphatically meets the needs of the third goal of the program.

Absolutely our beginning teachers have an impact on the learning of their

students. I am able to witness this when I go out to do classroom visits. I find that some beginning teachers are able to incorporate technology into their lessons, regardless of the subject matter. This generation also speaks their own “language” if you will, I believe that beginning teachers are sometimes better able to “tap” into this language, thereby creating a system of understanding and trust. (Anonymous, personal communication, June 29, 2018)

The results from the interview with the BT coordinator was that BTs do impact the lives of student learning in distinguished ways.

The quantitative results from the BT survey reported no statistical significance, indicating a normal response distribution among BTs. The qualitative results from the BT focus group and the interview with the BT coordinator report that the district has met the goal of BTs impacting student learning.

BTSP Goal 4: BTs choose to remain in the profession and become future masters of the profession, teacher leaders, skilled administrators, and superintendents. The BT survey items that aligned with the fourth goal of the BTSP included building relationships with principals and administrators, building relationships with other teachers, and did participating in the BT program influence your decision to remain a teacher. A chi-square test was run for each item, comparing the responses of BTs in their first and second year to third-year BTs. Table 74 reflects the results of the fourth goal.

Table 74

Difference between BT 1-2 and BT 3 on Survey Items Aligned to BTSP Goal 4

Survey Item	Category	Expected Response		BT Response		Chi statistic
		1-2	3	1-2	3	
Building relationships with principals and administrators	Not at all	8.55	9.45	11	7	2.86
	Sw Challenging	6.18	6.83	4	9	
	Challenging	3.33	3.68	3	4	
	Very Challenging	0.95	1.05	1	1	
Building relationships with other teachers	Not at all	9.98	11.03	11	10	0.71
	Sw Challenging	5.23	5.78	5	6	
	Challenging	2.85	3.15	2	4	
	Very Challenging	0.95	1.05	1	1	

The chi-square tests were run with one degree of freedom and an alpha level of 0.05. The chi statistic for each item was less than the critical value of 3.84. The data indicated there was no statistically significant difference in the responses of BTs as compared to their experience level, indicating a normal and independent response distribution.

The researcher recorded the focus group responses. Teacher 5 (personal communication, June 8, 2018) responded, “I’ve always wanted to be a teacher. I can say with 100% certainty that the [BT] program is why I choose to remain in the profession.” Teacher 6’s (personal communication, June 8, 2018) response included,

There are aspects of the program that I think helped a lot along my journey in the [BT] program. Having my mentor has been a big help. I’ve turned to her to help with issues with classroom management and dealing with parents.

Another response from the focus group was “while the BT program does have good aspects, I cannot say that any of them is the deciding factor in me continuing to be an educator” (Teacher 2, personal communication, June 8, 2018).

When asked the same question, the BT coordinator stated,

The BT program is designed to have a layered approach. This includes help from mentors, beginning teacher coordinators, assistant principals, and the principal.

The hope is that teachers will learn from these professionals and in turn become mentors, assistant principals, and principals.

The quantitative results reported no statistically significant difference in the responses of BTs, indicating an independent, normal response distribution; however, 100% of the participants stated they plan to return to teaching during the 2018-2019 school year. The qualitative data from the focus group report that BTs plan to stay in the profession but do not necessarily give credit to the BT program. The interview with the BT coordinator supports the idea that the BT program did meet Goal 4. The overall assumption is that BTs plan to remain in the profession but are uncertain if being a part of the BT program is the reason why they will remain.

Summary

This chapter provided information about the district's BTSP. Data were collected from surveys, a focus group, and a one-on-one interview. The results of the quantitative and qualitative data were analyzed to answer each research question to determine the effectiveness of the district's BTSP and its impact on teacher retention.

The qualitative and quantitative data were used to analyze the program components and supplementary support systems of the district's BTSP. The triangulation of data allowed the researcher to assure that the components of having a mentor and working with other BTs were effective to BTs staying in the profession. All of the BTs who participated in the study reported their plan to return to the teaching profession during the 2018-2019 school year. Based on the qualitative data gathered, components such as professional development, lesson planning, and data analysis were found to be

aspects of the program which could be enriched to better support BTs in the district.

Chapter 5: Discussion

Introduction

This study examined the BTSP in the southern region of Central County. This chapter provides an overview of findings from Chapter 4. A discussion of the meaning of the results is provided along with connections to existing research on teacher retention, limitations and delimitations of the study, scholarly significance, and recommendations for future research.

The purpose of this study was to evaluate a BTSP currently in a school district to determine its effects on teacher retention. The school district strived to meet the needs of BTs by using a layered approach model. The layered approach model involved the BT having support on varying degrees (Mingo, 2012). Upon being assigned to a school, every BT was assigned a mentor. This mentor was a veteran teacher who has completed training to be a mentor. This person served as the initial support line for the BT and took on the role as a guide (Eun et al., 2008). Each school also housed a BT site coordinator. The BT site coordinator was a veteran mentor who managed the BTSP at each school. The site coordinator was responsible for conducting monthly BT meetings where professional development was provided for BTs. The site coordinator also served as the liaison between the school and central office. The next layer of support came from the administration. There was an administrator or representative at each school who oversaw the BT program. The role of the principal was to provide guidance, feedback, and support to BTs throughout the time when they were in the program. Last, BTs were provided with numerous professional development opportunities through the central office. The types of professional development varied from help with lesson planning, formative and summative assessments, and differentiation. This layered support was

beneficial to the BT because it provided the tools needed to sustain the first years of teaching and helped combat teacher burnout.

Various methods of data collection were employed throughout this study to include surveys distributed to high school BTs in the southern region of the district, surveys distributed to the high school mentor teachers in the southern region, surveys distributed to the principals in charge of the BT program at the 10 high schools in the southern region, a focus group discussion with the BTs, and a personal interview with the regional BT coordinator.

Summary of the Results

The results of this study are summarized by the analysis of the goals of the district's BTSP and the research questions. Responses for both the goals of the BTSP and the research questions used in this study were gathered from survey item responses, focus group responses, and responses from a face-to-face interview to determine whether the goals of the district's BT program were met. The goals of the district's BT program included helping new teachers improve skills and become successful educators ensuring that BTs meet the state's professional teaching standards, BTs impact the learning of all students in distinguished ways, and BTs choose to remain in the profession and become future masters of the profession, teacher leaders, skilled administrators, and superintendents. The results of the study revealed that the district's BT program did meet these goals.

The results from the quantitative data reflect that there were no statistically significant responses of BTs and mentor/principals on the goals of the BT program, indicating that responses were in the normal distribution range and not indicative of experience level or job description. The results of the qualitative data suggest that the

goals of the district's BT program were met. The research study questions are employed below to summarize the results of this study.

Research Question 1: What are the current perceptions of BTs, mentor teachers, and administrators of the district's BT program as measured by the BT Survey, focus group questions, and BT coordinator interview? Research Question 1 analyzed the perceptions of the district's BT program. Analyses of survey responses from BTs; open-ended responses from BTs, mentors, and principals; and responses from the one-on-one interview with the BT coordinator allowed for triangulation of the data to gauge the perceptions of the district's program. The data indicated that BTs, mentor teachers, and administrator perceptions of the value of support to BTs were significant in the areas of mentoring, resources provided by mentors, and collaborating with other BTs and veteran teachers. The data indicated the need for continued work in areas including data analysis and co-teaching with mentors. One ambiguous area regarding effectiveness was professional development. BTs did not find professional development as significantly effective. Mentor teachers found professional development to be somewhat effective for BTs, while administrators found professional development to be highly effective. Mizell (2010) reflected on the importance of professional development by stating,

Professional development is the strategy schools and school districts use to ensure that educators continue to strengthen their practice throughout their career. The most effective professional development engages teams of teachers to focus on the needs of their students. They learn and problem solve together in order to ensure all students achieve success. (p. 1)

The issues that arise with professional development lie in perception. Those

planning the professional development might have one perception of the activities or the way the time is being spent, while the attendees may have a different perspective.

According to Dabbs (2018), new teachers are often left without a choice as to what professional development training they receive. According to Dabbs,

All too often new teachers are given professional development that they never had a voice in selecting. They are told to attend workshops around particular content areas and yet those very workshops might be things that they just do not need. (p. 1)

The recommendation is to administer a needs assessment to new teachers. Included in the needs assessments should be options of things for BTs to choose from and also a role in how the professional development is administered. Going this route will lead to more buy-in from BTs (Dabbs, 2018).

Research Question 2: What is the impact of the BT program as measured by the teacher attrition rate for BTs? Research Question 2 compared the previous years' BT turnover rate to determine the impact of the BT program on teacher retention. A trend analysis of the last 3 school years showed a decrease in the district's turnover rate from the 2014-2015 school year to the 2015-2016 school year and an increase in the turnover rate for the 2016-2017 school year in comparison to the 2015-2016 school year. This analysis was true for BTs in general as well as lateral entry teachers.

Chi-square analysis was run on the survey items asking BTs if they planned to return to teaching the remaining school year. While the majority of respondents planned to return to the same school district for the upcoming school year, the chi-square results revealed that there was no statistical difference in the responses and the experience level of the BTs.

Also, a chi-square analysis was run on the survey item asking BTs if they believed participating in the BT program had an influence on their decision to remain a teacher. The chi statistic was greater than the critical value. The results indicated that there was a statistically significant difference in the BT program influencing BTs to return to the profession and the experience level of the respondents.

Data for this question was also provided during the interview of the BTSP coordinator. The coordinator stated that the attrition rates of the district where this study took place were steady. The district administers an end-of-year survey to BTs, and some of the items on the survey pertain to attrition. The results of this study on items related to attrition have consistently been that most teachers planned to remain teaching in the district for the next school year. Those who were not planning to remain teaching in the district reported family issues as reasons for leaving and not necessarily concerns with the district itself.

Research Question 3: How effective are each of the components of the BT program in supporting BTs, as measured by the BT Survey, focus group questions, and the BT coordinator interview? Research Question 3 analyzed the effectiveness of the components of the district's BT program. Analyses of BT, mentor teacher, and administrator survey responses, focus group responses, and one-on-one interview responses allowed the researcher to triangulate data regarding the effective components of the district's program.

The data from BTs, mentors, and administrators used for this study consisted of a survey administered to BTs, mentor teachers, and principals. A focus group was held with BTs as well as an interview with the BTSP coordinator for the region. The data indicated that collaborating with other teachers, establishing professional goals with

mentors, having a veteran mentor, observations of master/veteran teachers, and support provided by the administration were effective components of the district's BTSP in meeting the needs of BTs. The qualitative data collected from mentor and administrator responses and the face-to-face interview noted the effectiveness of new teacher orientation, resources provided by a mentor, and the district as effective components of the program in meeting the needs of BTs.

Findings

The challenges of BTs were a key factor in analyzing the effectiveness of the district's BTSP. The findings of this study found that the BTs represented in this study reported challenges in the areas of preparation, motivating students, and classroom discipline.

Meister and Jenks (2000) interviewed 42 BTs from Pennsylvania, South Carolina, North Carolina, and Georgia. During the focus group interviews, one emerging theme was the feeling of being overwhelmed with the workload and time constraints (Meister & Jenks, 2000). New teachers reflected on the difficulties associated with time constraints for preparing and implementing lesson plans as well as tackling the amount of paperwork linked with the job (Meister & Jenks, 2000).

The goals of the district's BT program were examined to see if they were being met. The ultimate goal of induction programs and the educational system as a whole was to increase student achievement (Kneer et al., 2009). The results revealed that the district's BT program was meeting the intended goals throughout the program requirements. The multi-layered support system that BTs received played a part in the success of the BT program. The role of the on-site mentors, administrators, and regional coordinators provided BTs support from both the district and state level, which was

characteristic of a successful induction program (Wong, 2004).

The findings from this mixed-methods research study supported the following conclusion for the first research question: The district's BT program had numerous effective areas to help increase teacher retention; however, there were also several aspects that needed to be improved upon. Ingersoll and Kralick (2004) mentioned that key elements of induction programs vary by the types of services of the program and the duration and intensity of the involvement.

The findings from this mixed-methods research study support the following conclusion for the second research question: While there was no statistically significant impact of the BT program on the attrition rate for BTs, stakeholders of this study reported the importance of aspects of the program on BTs. Looking at trend data over the past 3 school years, the attrition rate fluctuated over those 3 years. All of the BTs who participated in this study reported that they planned to return to teaching during the next school year. While 100% of the participants planned to return to teaching during the 2018-2019 school year, it is unclear as to whether the district's BTSP was a deciding factor. The responses of those BTs who responded to the survey might be skewed due to job satisfaction. Those who were unsatisfied may have made the decision not to participate in the study due to their dissatisfaction.

Teacher attrition was a significant factor in the demand for the need for school districts having to hire new teachers (Ingersoll, 2001). The challenges that BTs faced were causes of the fluctuating BT attrition rates. Glickman et al. (2013) suggested that some of the challenges faced by BTs were unpredictability and difficult work assignments. While the attrition rate for BTs has fluctuated over the years, a chi-square test concluded that participation in the district's BT program was an influence on their

decision to remain in the profession, dependent on the experience level.

The findings from this mixed-methods research study supported the following conclusion for the third research question: There were several effective components of the district's BT program. These components included collaborating with other teachers, establishing professional teaching goals with mentors, having a veteran mentor, observations of master/veteran teachers, and support provided by the administration.

Teaching is hard for all educators in some aspect. Teachers are often plagued with limited time and resources to ensure that students with varying academic and emotional needs are successful. BTs juggle these challenges, coupled with the challenges of beginning a new career. Approximately 77% of BTs stay in the profession for the first 5 years. Attrition costs school districts billions of dollars, contributes to low teacher morale, and disrupts student learning ("Mentoring New Teachers," 2018).

In response to the above statistics, many states and school districts have implemented mentoring programs to support BTs. A common element of the mentoring/induction programs is the introduction of an assigned mentor. The mentor plays the role of guide in assisting new teachers in professional learning ("Mentoring New Teachers," 2018). Effective mentoring programs utilize a tiered process to respond to the needs of BTs. According to "Mentoring New Teachers" (2018), BT needs can be thought about on three different levels: low-level needs, mid-level needs, and high-level needs. The role of the mentor differs at each level.

At the low-level needs, mentors act as information providers for new teachers. For example, a BT with low-level needs would need assistance with logging on to the school computer and using the preferred software of the school. These BTs would also need assistance with procedural processes at the school; for instance, how to secure a

substitute and how to use the copy machine (“Mentoring New Teachers,” 2018). At the mid-level needs, mentors act as thought partners to new teachers. BTs with mid-level needs require assistance in finding the best way to collect, grade, and enter assessments and preparation for what to expect during a parent conference.

Mid-level supports are what new teachers need the most but are least likely to receive. Teachers’ days are filled with constant decision-making. New teachers who are not accustomed to this often experience decision-making fatigue. Mid-level supports help new teachers make and manage these decisions in ways that create smoother personal and professional transitions. Mentors have the greatest impact on teachers when they act as thought partners who balance empathy and expertise. (“Mentoring New Teachers,” 2018, p. 1)

There is a pressing need for school districts, schools, and mentors to prioritize mid-level needs.

At the high-level needs, mentors act as skill developers for new teachers. BTs with high-level needs need assistance in developing critical thinking essential questions for students, differentiating assignments for the varying level of students in the classroom, and creating high-quality literacy centers that foster student accountability (“Mentoring New Teachers,” 2018). The steady focus on teacher effectiveness in many school districts had led to the bypassing of mid-level needs and has put a target on BTs focusing on high-level needs. These efforts are often mismatched with what new teachers are able to prioritize. Prior to new teachers being able to critique school-based curriculum and instructional performance coaching, they need to feel comfortable in their newly acquired role and environment (“Mentoring New Teachers,” 2018).

Administrative support was also an area of effectiveness to BTs. Approximately

47% of the BTs surveyed in this study reported that building relationships with principals and administrators was not challenging. According to a report by Fultz and Gimbert (2009), the pace at which BTs adapted to the roles of an educator and whether to continue in the profession was related to a principal's involvement with BTs. A study conducted by Jackson (2008) also reported that an administrator playing the role of a supportive advocate was beneficial to BTs. The results from the qualitative data collected from this study supported both the studies conducted by Fultz and Gimbert and Jackson.

Components that were not as effective for BTs included co-teaching with mentors, lesson unit planning, and data analysis with a mentor, and outside professional development. Darling-Hammond (2010) reported that well-designed mentoring programs improved teacher retention rates among BTs. The results of this study confirmed the results of a study conducted by Marable and Raimondi (2007) which stated that BTs acknowledged mentoring as the most supportive factor during the BT induction process.

The theoretical framework for this study was based on Lev Vygotsky's (1962) sociocultural theory. The focal point of the sociocultural theory was ZPD, the zone of exploration where an individual is cognitively prepared but needs assistance from others to fully develop (Vygotsky, 1962). The main elements of ZPD consisted of a goal, the individual, and the guide (Eun et al., 2008). In the case of this study, the individual in need was the BT, and the guide was the BTSP and the mentor teacher. The results of this study displayed how imperative aspects of the district's BT program having a veteran on-site mentor helped them to develop and hone into their craft as an educator. BTs came to the job with mastery of content and the persistence to endure formal education to provide instruction to students. What they needed assistance with went beyond the lessons that

were taught through formal education programs and even student teaching. The BT program in its entirety and the mentor helped to bridge the gap between the utopian teachings prospective teachers received and the real-world demands of teachers.

Limitations of the Study

A limitation is an uncontrolled influence on a study (Creswell, 2014). An invitation to participate in the second focus group was included in the BT survey that was emailed. Less than 10% of those who responded to the survey agreed to be a part of the second focus group. The researcher reached out to those BTs who provided their email addresses, signifying their willingness to participate in the second focus group. No one responded. The researcher emailed those BTs 1 week later inquiring if they were still interested in being a part of the second focus group. The researcher did not receive a reply from the email.

More participation from focus group invitees may have provided additional feedback and follow-up regarding the effectiveness of the district's BT program. The research was conducted at the end of the school year. With state testing and professional development going on, this was a hectic time to conduct research. The second focus group was scheduled after the school year ended, even though it never occurred. The scheduling after the school year ended may have affected the response rate for the BT, mentor teacher, and principal surveys.

The district in which this study took place provided an end-of-year survey to all BTs. The researcher was asked not to disperse the surveys associated with this study until after the district's survey closed. BTs being asked to complete two surveys about the BTSP within 2 weeks of one another may have affected the response rate that the researcher received.

Due to the anonymity of the participants, the researcher was not able to analyze data based on mentor versus mentee to see if there was a correlation in responses. It would have been interesting to see if mentors and their mentees shared the same perceptions on aspects of the BTSP. This information could have potentially been helpful to the BTSP coordinator.

Another limitation of this study is self-selection. The researcher emailed all of the BTs, mentors, and administrators in the region of the district where this study took place. Those who chose to participate may have been the ones who had a better experience in the district's BT program than those who chose not to participate in the study.

Delimitations of the Study

Delimitations are restrictions that are set in place by the researcher (Creswell, 2014). The first delimitation of this study was the sample used. The chosen sample used for this study was not representative of the district as a whole. The researcher only surveyed participants from high schools in the southern region of the district. Another delimitation is that the on-site BT coordinators at the 10 high schools were not interviewed for this study.

Recommendations for Future Research

The results of this study had several implications for future research. The data collected from this study could be used to help improve the district's BTSP. The following recommendations are provided for future research.

The first recommendation is to continue to provide focus groups for BTs to reflect further their opinions and perceptions about the district's BT program. The focus groups should also be extended to focus groups for both mentors and administrators. "Focus group discussions add an element of richness to data" (Mingo, 2012, p. 134).

During the focus group interview, lateral entry teachers shared the requirements of being a lateral entry BT. The requirements included more than the traditional BTs. A deeper look into the pathway to licensure for lateral entry teachers would be beneficial.

Another recommendation would be for future researchers working in the district where this study was conducted to be mindful of the timing for collecting data. Collecting data at the beginning of the school year, during holidays, and at the end of the school year can be difficult. These are times when teachers typically do not check their work emails on a consistent basis.

Continuing to offer mentor teacher assistance to BTs is recommended. All subgroups expressed the importance of BTs having someone at the school site to assist them with the requirements of being a teacher. Mentors play an important role in the development of a BT.

Offering incentives to veteran teachers to become mentors is recommended. BTs need support. Teachers are constantly overworked, so to offer compensation might lead to more certified mentors.

This region of the district only had six regional BT coordinators. The district increasing the number of regional BTs could help to offer support to on-site BT coordinators. It also gives BTs another layer of support.

Other researchers should separate out the data responses for BTs by year. If separated, a researcher could compare responses by BT year. This comparison could lead to substantial data findings.

Other researchers could also study the effectiveness of the online components of the BT programs. Future researchers could analyze the online components to determine if BTs find training online to be more beneficial than face-to-face training. This

comparison could lead to substantial data findings.

The final recommendation includes a more in-depth study of the role of the BT coordinator at the individual schools. This person plays an integral role as the liaison between the BT, mentor, and central office. Feedback from the person in this role could have had interesting results in this study.

Recommendations for the District

Based on the data collected and the results of this study, the researcher has noted several recommendations as a result of this evaluation of the district's BT program. The first recommendation is to continue with the mentor component of the program. BTs, mentor teachers, administrators, and the coordinating teacher for the southern region all reported how impactful mentees having a mentor was for new educators.

In discussing the importance of mentor teachers to the BT program, the second recommendation is for the district to recruit more mentor teachers actively. Often mentor teachers have more than one mentee on their caseload. Having more than one mentee could potentially take away the time that mentors should be spending one-on-one with a single mentee. Individual schools need to provide incentives beyond the incentive provided by the school district to attract more veteran teachers to apply to become a mentor.

A third recommendation for the district is to provide more support for lateral entry teachers. Responses from focus group discussions emphasized how lateral entry teachers have other state-mandated requirements in addition to the BT program. It was stated that it would be helpful if the district's BT program were more inclusive of the alternative requirements of lateral entry teachers regarding professional development and resources.

A fourth recommendation would be to match lateral entry mentors with lateral entry BTs. Lateral entry BTs made up 22.5% of the participants in this study. Lateral entry mentors made up approximately 11% of the participants in the study. Judging from focus group responses, the lateral entry program is one that differs from the traditional BT program, and the support provided to lateral entry teachers from lateral entry mentor teachers would be profound.

A final recommendation for the district is to provide more specific professional development for BTs and mentors. Glickman et al. (2013) made note of how ineffective professional development can be regarding induction programs. The results of the focus group discussions were to have professional development that was not only specific to the subject matter but also to the school and the surrounding community.

Conclusion

This study was conducted to evaluate the district's BTSP to determine if the program was meeting the needs of BTs and to determine its impact on teacher retention. This study proved that the needs of BTs, mentors, and administrators in regard to a BT program are inconsistent. The subgroups were not in agreement on the needs of BTs. While the main goals of induction programs are to provide BTs with instruction on classroom management and effective teaching skills (Anhorn, 2008), consideration should be given to the individualized needs of BTs based on schools and school districts as well as discipline.

The results showed that the BT attrition rates, while steady, still had inconsistencies. This inconsistency is proof enough for the need to establish effective induction programs nationwide. National and statewide retention initiatives need to be further examined to ensure that school districts are retaining the most effective classroom

teachers.

The results of the study allowed the researcher to conclude that BTs benefitted from components of the BT program related to having a mentor, resources provided by mentors, and collaborating with other teachers. While there were program components that were effective, there were several program components in need of improvement. One area in need of improvement is data analysis. Judging from the qualitative responses, co-teaching was not deemed effective, primarily because co-teaching was not an option used at the high school level for courses other than special education. There is a need for more model school induction programs like Leyden High School District and Lafourche Parish Public Schools (Wong, 2002) to share with other school districts the steps taken that lead to the effectiveness of these programs. The hope is that other school districts can incorporate these policies into their induction programs for increasing teacher retention.

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Appendix A
Beginning Teacher Survey

Beginning Teacher Survey

There are no risks related to participation in this study. The data collected from this survey will not include any identifiable information. Your participation is entirely voluntary and if you decide to complete the survey, you are free to withdraw at any time. Your completion and submission of the survey indicate your consent to participate in the study.

Background Information

As a beginning teacher, what areas do you find most challenging?				
	1 Not at all	2 Somewhat Challenging	3 Challenging	4 Very Challenging
Additional clerical work/responsibilities				
Assessing student work				
Awareness of school policies and rules				
Building relationships with other teachers				
Building relationships with principal and/or administrators				
Classroom discipline				
Classroom management				
Dealing with difficult students				
Determining student learning levels of students				
Effective use of different teaching methods and strategies				
Effective use of textbooks and curriculum guides				
Getting materials, supplies and other educational resources				
Having adequate time to prepare				
Interaction with parents and guardians				
Knowledge of subject matter				
Motivating students				
Obtaining guidance and support				
Planning lessons and activities				
Time Management				
Working with slow learners				

Working with students of different ethnic and cultural backgrounds				
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What year beginning teacher are you?

- Year 1
 Year 2
 Year 3

Are you a lateral entry teacher?

- Yes
 No

Do you plan to return to teaching in 2018-2019?

- Yes — in the district
 Yes — in another district
 No
 Unsure

***As a follow-up to this survey, the researcher will be conducting focus group interviews with beginning teachers. There will be more information to come on the date and time. Providing your email below denotes your willingness to participate in the focus group interviews.**

How often did you meet with your mentor?

- 1 to 3 times
 3 to 5 times
 more than 5 times

What was your comfort level towards approaching your mentor to discuss a problem?

- Not at all
 Somewhat comfortable
 Comfortable
 Very comfortable

What was your comfort level towards approaching your mentor to discuss an interest area?

- Not at all
 Somewhat comfortable
 Comfortable
 Very comfortable

How supported did you feel by your mentor?				
	1	2	3	4

	Not at all	Somewhat Supported	Supported	Very Supported
With Lesson plan development				
With Classroom Management				
With finding teacher/classroom resources				
Helping me make relationships with other teachers				

Overall, working with my mentor:

___ was a factor in why I decided to remain a teacher

___ was a factor in why I decided NOT to remain a teacher

How effective did you find the following program components:				
	1 – Not at all	2 – Somewhat Effective	3 - Effective	4 - Very Effective
Beginning teacher professional development				
Collaborating with other teachers				
Co-teaching with mentor				
Data analysis with mentor or colleagues				
Establishing professional teaching goals with mentor				
Having a Veteran Mentor				
Lesson unit planning				
Modeled lessons				
New teacher orientation				
Observation and data collection by mentor of my lessons				
Observations of master/veteran teachers				
Outside professional development				
Resources provided by mentor				
Support provided by my administrator				

Thinking about your experience, did you encounter other challenges that were not addressed by the BT program that should be included? (if no, please enter none).

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support your skills?

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support your skills?

Overall, do you think participating the BT program will influence your decision to remain a teacher?

Appendix B
Focus Group Questions

Focus Group Questions

Opening Question:

Our purpose today is to discuss your perceptions on the district's BT program so that recommendations for improvement can be made. Everything that we do here is completely voluntary. You do not have to answer questions if you choose not to and you are free to leave the meeting at any time. We will specifically discuss your perceptions of the program involving differing areas of support, i.e. mentor support, administrative support, classroom management, etc.

1. Tell us your name, your years of experience, the school you currently teach, and the subject matter that you teach.

Introductory Question:

2. Describe your experience as a BT in the district's BT program.

Transition Question:

3. Prior to you beginning your initial teaching assignment with the district, what did you think BT support would look like?

Key Questions:

4. Do you feel more prepared from participating in the beginning teacher induction program?
5. What was the most beneficial component of the beginning teacher program?
6. What was the least beneficial component of the beginning teacher program?
7. What component would you add to the program that would support beginning teachers?

Ending Question:

8. Is there something specific that the district could do, create, change, or offer that would help beginning teachers continue in the education field?

Appendix C
Mentor Survey

Mentor Survey

There are no risks related to participation in this study. The data collected from this survey will not include any identifiable information. Your participation is entirely voluntary and if you decide to complete the survey, you are free to withdraw at any time. Your completion and submission of the survey indicate your consent to participate in the study.

Demographic Information

Are you a lateral entry teacher?

Yes

No

How many years of experience do you have as a teacher?

5-10

11-15

16-20

20+

Is your mentee in the same department as you?

Yes

No

Other (check this if you have more than one mentee and at least one is in your department)

How often did you meet with your mentee?

1 to 3 times

3 to 5 times

more than 5 times

What was your level of comfort towards assisting your mentee with a problem?

Not at all

Somewhat comfortable

Comfortable

Very comfortable

What was your level of comfort towards discussing an interest area with your mentee?

Not at all

Somewhat comfortable

Comfortable

Very comfortable

In what areas did your mentee/BT require the most support?				
	1 Not at all	2 Some support	3 Support	4 A lot of support
With Lesson plan development				
With Classroom Management				
With finding teacher/classroom resources				
Helping me make relationships with other teachers				

How effective did you find the following program components?				
	1 Not at all	2 Somewhat Effective	3 Effective	4 Very Effective
Beginning teacher professional development				
Collaborating with other teachers				
Co-teaching with mentor				
Data analysis with mentor or colleagues				
Establishing professional teaching goals with mentor				
Having a Veteran Mentor				
Lesson unit planning				
Modeled lessons				
New teacher orientation				
Observation and data collection by mentor of my lessons				
Observations of master/veteran teachers				
Outside professional development				
Resources provided by mentor				
Support provided by the administration				

As a mentor, did your mentee encounter other challenges that were not addressed by the BT program that should be included? (if no, please enter none).

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support the skills of beginning teachers?

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support the skills of beginning teachers?

Overall, do you think participating the BT program is significant influence for beginning teachers to remain a teacher?

Appendix D
Principal Survey

Principal Survey

There are no risks related to participation in this study. The data collected from this survey will not include any identifiable information. Your participation is entirely voluntary and if you decide to complete the survey, you are free to withdraw at any time. Your completion and submission of the survey indicate your consent to participate in the study.

Demographic Information

How many years of teaching experience do you have?

- 5-10
- 11-15
- 16-20
- 20+

How many years of administrative experience do you have?

- 5-10
- 11-15
- 16-20
- 20+

How many beginning teachers are at your school?

- 1 to 5
- 5 to 10
- 11 to 15
- 15 +

How effective did you find the following program components?				
	1 Not at all	2 Somewhat Effective	3 Effective	4 Very Effective
Beginning teacher professional development				
Collaborating with other teachers				
Co-teaching with mentor				
Data analysis with mentor or colleagues				
Establishing professional teaching goals with mentor				
Having a Veteran Mentor				
Lesson unit planning				
Modeled lessons				
New teacher orientation				
Observation and data collection by mentor of my lessons				
Observations of master/veteran teachers				
Outside professional development				
Resources provided by mentor				
Support provided by the administration				

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support the skills of beginning teachers?

Thinking about your experience in the BT program, which component did you find most beneficial to enhancing/support the skills of beginning teachers?

Overall, do you think participating the BT program is significant influence for beginning teachers to remain a teacher?

Appendix E

BT Support Coordinator Interview

1. What are the merits of the Beginning Teacher Induction Program?
2. What is included in the orientation?
3. How are mentors selected?
4. How are mentors assigned?
5. How are professional development opportunities selected for beginning teachers?
6. What are the networking experiences that are provided for beginning teachers?
7. What assistance is provided to beginning teachers to ease the transition into the classroom?
8. How is self-reflection encouraged?
9. Tell me about the role of the site support leader.

Appendix F
Croffut Permission

From: [REDACTED]
Sent: Wednesday, January 3, 2018 8:12 AM
To: [REDACTED]
Subject: Re: Focus Group Questions

Thanks for responding [REDACTED]. I am having a hard time of finding the work of [REDACTED]. Do you have a title for her work?

Also, for IRB purposes- I want to be very clear. Do I have your permission to use your surveys, focus group questions, and interview questions you used for the interview you conducted with the director of Human Resources? Again, thanks for your patience and your time. It is greatly appreciated!

RE: Focus Group Questions



Wed 1/3, 9:35 PM
You



I had a hard time tracking her down and don't remember how I did. I no longer have my Wingate email account to go back and find my correspondence with her. I am sorry I can't be of more help with this.

I do give my permission to use my surveys, focus group questions, and interview questions.

Congratulations on getting this far. You are close to the finish line!



Appendix G
Interview Protocol

Thank you for participating in this research. We will begin by reviewing the consent form. I want to remind you that you do not have to answer any question you do not wish to answer. You are also free to withdraw your participation from this study at any time.

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee:

1. Permission to record
2. Instructions for the interviewer
3. The following questions will be asked of the interviewees
4. Probing questions will also be asked to allow interviewees to elaborate on what they have said
5. Notes will be taken of the interview, as well as audiotaping
6. A final thank you statement to acknowledge the time the interviewees spent during the interview

Appendix H
Consent Form

Gardner-Webb University IRB

Informed Consent Form

Title of Study: From the beginning: An Analysis of a Beginning Teacher Program

Researcher: Andrea M. Anderson, Doctoral Candidate/ EDCI

Purpose

The purpose of the research study is to evaluate the effectiveness of a Beginning Teacher Support Program of a school district on increasing teacher retention.

Procedure

What you will do in the study: Beginning teachers, mentors, and principals will be asked to participate in a Beginning Teacher Survey. The survey will be administered through Google Forms. Participants will be informed that they can skip any question that causes discomfort and that they can stop the survey at any time. Beginning teachers will be given the opportunity to participate in a focus group interview. The focus group interviews will be audiotaped and videotaped. Participants will be informed that they can skip any question that causes discomfort and that they can stop the interview at any time. A face-to-face interview will be conducted with the beginning teacher support coordinator for the southern region of the district. The participant will be audiotaped and videotaped. The participant will be informed that they can skip any question that causes discomfort and that they can stop the interview at any time.

Time Required

It is anticipated that the study will require about 30-60 minutes of your time.

1. Surveys- The expected time it will take participants to complete the survey is approximately 5-6 minutes
2. Focus groups- This study will include multiple focus group interviews. The anticipated time for each focus group will be around 30-45 minutes.
3. Interview- There will also be an in-face interview, which is also projected to be around 30-45 minutes.

Voluntary Participation

Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identified state.

Confidentiality

1. Surveys- The surveys will be administered online with responses being anonymous.

The researcher will only be provided the email address of survey participants who wish to participate in the focus group interviews. All information given in the study will be handled confidentially. Your information will be assigned a *code number*. The list connecting your name to this code will be kept in a *locked file*. When the study is completed and the data is analyzed, this list will be destroyed. Your name will not be used in any report. The information that you give in the study will be handled confidentially. Your data will be anonymous which means that your name will not be collected or linked to the data.

2. Focus groups and Interviews- Beginning teachers will make-up the focus group. An interview will be conducted with the coordinating teacher for the southern region of the district in which this study will be completed. Because of the nature of the data, I cannot guarantee your data will be confidential and it may be possible that others will know what you have reported.

Data Linked with Identifying Information

The information that you give in the study will be handled confidentially. Your information will be assigned a *code number*. The list connecting your name to this code will be kept in a *locked file*. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report. Audio tapes and video tapes will be destroyed once the study has been fully completed.

Anonymous Data

The information that you give in the study will be handled confidentially. Your data will be anonymous which means that your name will not be collected or linked to the data. Because of the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so, and your data will be reported in a way that will not identify you.

Confidentiality Cannot be Guaranteed

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

Risks

There are no anticipated risks in this study. If, as a result of the study, you experience discomfort and would like to discuss your thoughts or feelings with a counselor, please contact the following individual for assistance. The researcher, Andrea Anderson, can be reached at [REDACTED]. The dissertation supervisor, Dr. Jenny Sabin, can be reached at [REDACTED].

Benefits

There are no direct benefits associated with participation in this study. The study may help us to understand the effectiveness of the Beginning Teacher Support Program on retaining teachers. The Institutional Review Board at Gardner-Webb University has determined that participation in this study poses minimal risk to participants.

Payment

You will receive no payment for participating in the study.

Right to Withdraw From the Study

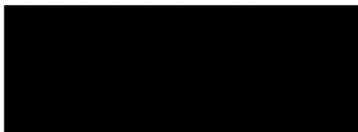
You have the right to withdraw from the study at any time without penalty. If you choose to withdraw from the study, your audio (or video) tape will be destroyed.

How to Withdraw From the Study

- If you want to withdraw from the study, you can send the researcher an email stating your request, in the case of the focus group and/or the interview, you can tell the researcher and leave the room, or tell the interview/researcher to stop the interview. There is no penalty for withdrawing.
- If you would like to withdraw after your materials have been submitted, please contact Andrea Anderson at [REDACTED]

If you have questions about the study, contact the following individuals.

Andrea M. Anderson
School of Education



Dr. Jenny Sabin
School of Education



If the research design of the study necessitates that its full scope is not explained prior to participation, it will be explained to you after completion of the study. If you have concerns about your rights or how you are being treated, or if you have questions, want more information, or have suggestions, please contact the IRB Institutional Administrator listed below

Dr. Jeffrey S. Rogers
IRB Institutional Administrator



Voluntary Consent by Participant

I have read the information in this consent form and fully understand the contents of this document. I have had a chance to ask any questions concerning this study and they have been answered for me.

- _____ I agree to participate in the confidential survey.
 _____ I do not agree to participate in the confidential survey.
- _____ I agree to participate in the focus group.
 _____ I do not agree to participate in the focus group.
- _____ I agree to participate in the interview session(s). I understand that this interview may be video/audio recorded for purposes of accuracy. The audio/video recording will be transcribed and destroyed.
 _____ I do not agree to participate in the interview session(s).

_____ Date: _____
 Participant Printed Name

_____ Date: _____
 Participant Signature

You will receive a copy of this form for your records.

Facebook Messenger chat interface with contact Adriane Watkins Mingo. The chat shows a blue message from the user dated 06/26/2017 6:59PM and a grey response from Adriane Watkins Mingo dated 07/15/2017 12:28PM. The right sidebar shows options like 'Search in Conversation', 'Edit Nicknames', 'Change Color', 'Change Emoji', and 'Notifications'. The status bar at the bottom shows the time as 1:43 PM on 2/5/2018.

Adriane Watkins Mingo

06/26/2017 6:59PM

Hello [redacted], I am a current EDCI doctoral student at Gardner-Webb. I have a weird request. I need your help in contacting [redacted]. I noticed that you mentioned her in your dissertation. I would like to ask her permission to use her focus group questions from her dissertation. Would you be willing to either forward my contact info to her or to give me her email address? I appreciate any help that you could offer.

07/15/2017 12:28PM

Adriane Watkins Mingo accepted your request.

Yes. Dr. Shepherd is an amazing educator. Sorry I am just seeing this. I am currently in Nashville. My email address is [redacted]. please email me and I will forward you Monica's context info. Talk soon.

Type a message...

Options

- Search in Conversation
- Edit Nicknames
- Change Color
- Change Emoji
- Notifications

Facebook Profile

1:43 PM
2/5/2018

Continuation of the Facebook Messenger chat with Adriane Watkins Mingo. A blue message from the user dated 07/16/2017 2:06PM is followed by a grey response from Adriane Watkins Mingo dated 07/16/2017 6:35PM. The right sidebar is visible, showing the contact name and various options.

Adriane Watkins Mingo

07/16/2017 2:06PM

Thank you for responding Dr. Mingo. The question I have actually applies to you or Dr. Shepherd. I am wanting to use the interview questions from either your dissertation or Dr. Shepherd for my dissertation. I came across Dr. Shepherd's dissertation first and could not find any contact info. for her. A cohort member informed me that you referenced her in your dissertation. It wasn't until after that that I found your dissertation and really liked the interview questions that you used for the BT coordinator and superintendent. Both of you ladies did such a wonderful job, I would gladly like permission to use yours questions.

07/16/2017 6:35PM

Yes. You are welcome to use any of my work. I too really thought Monica's questions hit home on what I wanted to know and learn. She also served on my committee. Let me know if i can assist you in any way. Dr. Janet Anthony was also referenced in both our work. She's an assistant principal in Cleveland County. Not sure if you've seen her dissertation - as a GWU graduate. Talk soon.

Options

- Search in Conversation
- Edit Nicknames
- Change Color
- Change Emoji
- Notifications

Facebook Profile