AN INVESTIGATION OF THE RELATIONSHIP BETWEEN FACTORS OF BEGINNING TEACHERS' DEVELOPMENT WITHIN A MENTOR-BASED

INDUCTION PROGRAM

by

James Kenny Davis

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

This dissertation was a quantitative, correlational study that examined the impact of the mentor component of a mentor-based induction program on three factors of new teacher development and support. The focus of this study was on beginning teachers participating in a districtsupported mentoring program designed to support and acclimate teachers to the role of professional teacher as well as to support and acclimate teachers to the policies, procedures, and culture of the district. A convenience sample totaling 130 teachers at a large urban school district in southeast Georgia participated in this study. The participants represented varied levels of degree completion, grade levels taught, and ages of teacher. These teachers voluntarily completed the Teacher Efficacy, Perception of Mentor, and Commitment Survey, which consisted of three sections that focused on each of the three focal factors outlined in this research. The survey included a combination of multiple choice items and Likert-scale responses taken from the Georgia State Induction Phase Teacher Survey and the Teachers' Sense of Efficacy Scale. Descriptive statistics were used to describe the sample's demographics, questionnaire items, and scale scores. Findings indicated no statistically significant relationship between the teachers' perceptions of their mentors and their commitment to teaching. There was, however, a small, but statistically significant, positive relationship between teachers' perceived teaching self-efficacies and their commitment to teaching.

Keywords: induction, mentor, perception, teacher, commitment, self-efficacy

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CHAPTER ONE: INTRODUCTION

In Georgia, an estimated 44% of beginning public school teachers leave the profession within the first five years of entering the profession (Owens, 2015). This statistic is of concern because almost all reforms within public schools rely on the implementation of efforts of the classroom teacher (Owens, 2015). Understanding and addressing the rate at which beginning teachers leave the profession is necessary to ensure continuity of learning programs and effective allocation of funds within school districts.

Background

For beginning teachers to remain in the teaching profession, their acclimation/induction period needs to be personally and professionally fulfilling (Skilbeck & Connell, 2003), offer targeted professional learning (Corbell, Osbourne, & Rieman, 2010), and provide support from mentor teachers (Huling, Resta, & Yeargain, 2012). Accommodating these needs will assist in counterbalancing the difficulties faced during the first year in the profession (Kidd, Brown, & Fitzallen, 2015).

Beginning teachers, regardless of their pathways into the teaching profession, are not fully prepared for their first day and have much to learn (Martin, Buelow, & Hoffman, 2016). Many often enter the profession through difficult teaching assignments and conditions that can set them up for failure. In many districts that enroll large numbers of low income students, beginning teachers leave at high rates. Nationwide, 15.2% of teachers at high poverty schools leave their schools annually. Turnover rates in these districts are also proportionally much higher in low-performing, high poverty settings (Donaldson & Moore, 2010; Ingersoll, 2001). These statistics are important because poor communities have moderately higher percentages of beginning teachers than communities with lower poverty rates. Districts in the highest quartile of poverty have an average of 11% beginning teachers (Gagnon & Mattingly, 2012). According to Gagnon and Mattingly (2012), districts with a higher concentration of minority students are associated with a higher percentage of beginning teachers. Large cities, remote towns, and rural districts have higher percentages of beginning teachers (11%, 9.8%, and 9.7%, respectively) than midsized-small cities, suburbs, and fringe-distant town districts (Gagnon & Mattingly, 2012).

The high concentration of beginning teachers in a district speaks to teacher hiring and development. A higher percentage of beginning teachers require additional funding in teacher development. Although beginning teachers are paid less than their more experienced peers, these savings may be overshadowed by the increased costs of the recruiting and training needed to hire and acclimate them to the profession.

Traditionally, the teaching profession has not had the kind of support, guidance, and orientation for new employees that is common to many skilled blue- and white-collar occupations (Ingersoll & Strong, 2011). First year teachers are encouraged to transition from learning-to-teach, to teaching-for-learning and concomitantly be members of a school community while adjusting to its organization and culture (Griffin & Miller, 1987). The first year of teaching is crucial in that it could shape or impact teaching patterns and influence teacher retention and attrition. School researchers, reformers, and leaders have long pointed out that although teaching involves intensive interaction with children, the work of teachers is largely done in isolation from colleagues (Ingersoll & Strong, 2011). Addressing this isolation has long been the task of the school building level administrator. New teachers are often paired with a more experienced teacher for the purpose of guiding, coaching, and supporting a progression into greater levels of competence and confidence or progression into being more self-efficacious.

These more experienced peers are mentors. Mentors are not evaluators. Rather, they are assistants, entrusted with the care, education, and nurturing of other teachers. Often, the main criterion upon which mentors are appointed to their position is their experience (Stingu,

Eisenchmidt, Iucu, 2016). The substance and frequency of new teacher-mentor interactions may have important implications for improving novice teacher effectiveness and reducing teacher attrition (Pogodzinski, 2015). The frequency of interaction is often directly related to the extent to which a mentor is an expert in the new teacher's field and indicative of a supportive environment within both a new teacher and mentor have time to have meaningful interactions (Achinstein, Ogawa, & Speiglman, 2004; Pogodzinski, 2015).

In an effort to develop new teachers, many districts have created induction programs to provide professional development along with the support of a well-trained mentor (Martin et al., 2016). These programs vary in context and focus between districts but typically include orientation, classroom support and collaboration with colleagues, and mentoring (Ingersoll & Strong, 2011). In recent years, after data were collected to assess the effectiveness of induction programs, there has been a movement to improve new teacher induction programs (Martin et al., 2016).

Problem Statement

Nationally, almost two-thirds of teachers reported participating in an induction program during their first year of teaching and 71% had a mentor (Darling-Hammond, Wei, Andree, Richardson, & Ophanos, 2009; Martin et al., 2016). Even though this is a promising statistic, it is important to further understand the varying quality of new teacher induction/mentoring programs and the impact participation in such programs has on new teachers' perceptions of their performance or commitment to the profession. While data and research are available indicating a link between induction and retention, only about 1% of new teachers receive what they perceive as quality, beneficial, comprehensive induction that would lead to self-efficacious and committed new teachers (Alliance for Excellent Education, 2005; Ingersoll & Strong, 2011; Martin et al., 2016). Some researchers have demonstrated how teacher commitment is moderated by powerful intervening variables related to working conditions, such as collegiality, involvement in decision-making, and opportunities for professional development (Krasnoff, 2014). Krasnoff (2014) also posits the teachers' sense of self-efficacy plays a role in the decision to stay or leave for both novice and veteran teachers.

Many school systems use induction programs or induction component-only programs as an aim of contributing to and impacting new teachers' well-being and professional development. However, the problem is that little is known about the actual influence or impact of these programs, or components of these programs from the perspective of the new teachers on their perceived self-efficacy and commitment to teaching, as they relate to a component of the induction program, mentoring. Msila (2013) argues that many dysfunctional schools might be failing because teachers have lost the commitment to their profession. Because new teachers typically participate in induction programs within the first three years of joining the profession, it is best to gain their perceptions of how their relationships with their mentors fostered a school culture where they were free to share knowledge, fears, wants, growth, and innovations (Msila, 2013). Beginning teachers need trained mentors prepared to support them in the early stages of teaching whom they perceive as effective. Without knowing the perceptions of the beginning teacher, it would be impossible to improve the efficiency and effectiveness of current mentoring systems within an induction program (Kidd, Brown, & Fitzallen, 2015). The perceptions of new teachers, especially those in districts serving high populations of children in poverty, help those interested in new teacher induction to make sense of their experiences to understand further how programs can be improved to better provide quality support in promoting a higher sense of selfefficacy, commitment to teaching, and quality mentors (Bogdan & Biklen, 2007).

Purpose Statement

The purpose of this correlational study was to determine the relationship between new teacher self-efficacy and the perception of their mentors as part of a new teacher induction program; if there is a difference between new teachers who are committed and those who are not committed to teaching based on the perception of their mentors; and if there is a difference in teachers perceived self-efficacy between teachers who are committed to teaching and those who are not. Participants for this study included all teachers who were classified as new teachers during the 2012–2013 and 2013–2014 school years in a particular school district. New teachers in this induction program included those teachers who were new to the profession, or new to the state, school district, or grade level. Six hundred-sixty teachers were invited to participate in the study. An online survey was emailed to all teachers classified as new teachers during the given time period. The survey contained items addressing the teachers' sense of self-efficacy, perception of their mentor, and their commitment to teaching. One hundred-thirty teachers successfully completed the survey and consented to the use of the information provided to be included in the data collected for this study.

The independent variable was teacher commitment. Teacher commitment is defined as a personal commitment to the job of teaching emphasizing fulfillment from exercising craft and a sense of relevance in one's work (Firestone & Rosenblum, 1988; Msila, 2013). The dependent variables were teacher self-efficacy and the perceived performance of the new teachers' mentors. Perceptions of mentoring is defined as the identification of themes using one's senses as they relate to the experiences between mentor and mentee. Teacher self-efficacy is defined as a teacher's belief in one's own ability to effectively influence student learning and bring about positive student change (Stryker & Szabo, 2009).

Significance of the Study

Induction and mentoring has been the focus of empirical research for well over a quarter century (Langdon et al., 2016; Wang, Odell, & Schwille, 2008). Existing research has established a positive association between induction and mentoring programs and the retention, success, and wellbeing of new teachers (Ingersoll & Strong, 2011; Langdon et al., 2016; Richter, Dawson, & West, 2011). This association has been found to be particularly strong when new teachers participate in multiyear, comprehensive programs (Glazerman et al., 2010). Comprehensive induction programs entail supportive leaders, the provision of critical resources and provide conducive environments, and they address the professional relationship and interactions between mentor and mentee and their construction of knowledge (Youngs, 2007; Moir, Barlin, Gless, & Miles, 2009; Kemmis, Heikkinen, Franson, & Aspfors, 2014; Langdon et al., 2016).

Because mentoring is a major component of the induction process, it is important to obtain and analyze new teachers' perceptions of how interactions with their mentors affected different factors of their induction experience and teaching practice. The current investigation represents an attempt to demonstrate the comprehensive nature of induction by reporting a correlational study of perceptions of new teachers having had participated in an induction program in the southeast.

Good quality mentoring programs strengthen and build the quality and professionalism of beginning teachers, enhance job satisfaction, and reduce teacher attrition (Spooner-Lane, 2016). There appears to be great variation in the quality of mentor programs and their perceived effectiveness and impact on factors affecting teacher practice (Hobson et al., 2009; Pennanen, Bristol, Wilkinson, & Heikkinen, 2016). To guard against the possibility of having an ineffective program, it is important that existing mentoring programs be evaluated by the participants of the program to determine if they perceive their needs as being or having been met.

Teacher self-efficacy is associated with a multitude of positive outcomes for teachers and students. However, the development of teacher self-efficacy is an under-researched area of teacher development (Pfitzner-Eden, 2016). Existing research illustrates the wide utility of this construct as related to it being a determining factor in how teachers interact and perform with the students in their classrooms (Petchauer, 2016; Tschannen-Moran & Woolfolk-Hoy, 2001; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). The findings from this study could have great implications for the district's induction program as well as providing evidence that this under-research area of teacher development is in need of more attention. The initial/first year of induction is the focus of this study and therefore the district could be provided with valuable information and data from the perspective of its newest teachers. The district can then determine if change could be beneficial or if current practice is sufficient. On a larger scale, the data that are collected has the potential to validate current research conducted by educational researchers and induction reformers.

A long-term implication of this study is that it has the potential to validate the opinions and perceptions of new teachers involved in this district's program and others like it nationwide. It could provide a connection between the perceptions of new teachers' experiences and interactions with their mentors thus validating the importance of meaningful mentor-mentee interactions. Furthermore, if new teachers perceive their input about induction is valued, they are potentially more likely to continue with a level of higher organizational commitment. The themes presented from the analysis of data can further enhance the importance of understanding teacher self-efficacy as a factor impacted by induction programs. By conducting research in this focus district, the results of previous studies involving other induction programs nationally and internationally become more relevant and personal to those who influence decisions and the design of local or state induction programs.

The findings from this study will add to the existing empirical literature by detailing the perceptions of new teachers participating in a comprehensive district-wide teacher induction program. It will shed light on the perceived impact of the induction process from the perspective of the new teacher as it relates to self-efficacy, mentors, and commitment to the profession. Highlighting perceptions will allow educational leaders and induction reformers, and educational researchers to target the specific needs of their attention when responding to the unique needs of new teachers (Shernoff, Maríñez-Lora, Frazier, Jakobsons, & Atkins, 2011).

Finally, the results of this current study will support findings from mainstream educational research that new teachers need a confidant and someone on whom they can rely, concurrently with structures that facilitate learning and collaborative planning with colleagues of the same content (Cotton, 2003; Joyce & Showers, 2002; Martin et al., 2016).

Research Questions

RQ1: What is the relationship between a new teacher's self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale)?

RQ2: Is there a difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching?

RQ3: Is there a difference in new teachers' perceived teacher self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching?

Definitions

- 1. *Induction* Induction is defined as a comprehensive, coherent, sustained professional development process that is organized by a school district to train, support, and retain new teachers (Wong, 2004).
- Mentor Mentor is defined as a component of the induction process involving a single person serving as a mentor whose basic function is to help a new teacher (Wong, 2004).
- 3. *Perception of mentor* The identification of themes using one's senses as they relate to the experiences between mentor and mentee (Clark & Brynes, 2012).
- Teacher commitment Teacher commitment is a personal commitment to the job of teaching emphasizing fulfillment from exercising craft and a sense of relevance in one's work (Firestone & Rosenblum, 1988; Msila, 2013).
- Teacher self-efficacy Focusing on the individual teacher's self-assessment, teacher self-efficacy is defined as beliefs that are related to the effort teachers invest in teaching, the goals they set, their persistence when things do not go smoothly, and their resilience in the face of setbacks (Tschannen-Moran et al., 1998; Dixon, Yssel, McConnell, & Hardin, 2014).

CHAPTER TWO: REVIEW OF LITERATURE

This chapter reviews related research and theories regarding the relationship between first-year teachers' sense of self-efficacy, their commitment to teaching, and the perceived relationship with their mentor. In this chapter, the underlying principles, definitions, and theories of self-efficacy in teaching are addressed. This review expands upon Vygotsky's sociocultural learning theory, Bandura's social cognitive theory, and Meyer and Allen's model of organizational commitment. The literature review also contains background information on the development of new teachers, teacher certification, teacher induction programs, and mentoring.

Theoretical Framework

The relationship between first-year teachers' self-efficacy, their commitment, and their perceptions of the relationship with their mentor is based on three theories. The sociocultural learning theory of Vygotsky (1978) provides the framework for how mentors help, guide, and support first-year teachers learn to teach and adapt to their school's culture. The social learning theory of Bandura provides the theoretical framework for studying teacher self-efficacy. Finally, organizational commitment refers to the degree that an individual internalizes organizational values and goals and feels a sense of loyalty in the workplace. The Meyer and Allen model of organizational commitment provides the dominant framework by which researchers study workplace commitment (Jaros, 2007).

Vygotsky's Sociocultural Learning Theory

The accumulation of knowledge is not an isolated event. It occurs through the social interactions with individuals and the use of cultural tools, artifacts, and experiences (Clark & Byrnes, 2012). Vygotsky's (1978) sociocultural learning theory best describes this social acquisition of knowledge. The theory is based on the concept that human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best

understood when investigated in their historical development (John-Steiner & Mahn, 1996). Vygotsky asserted that human development starts with dependence on caregivers or others with more experience, and over time the individuals begin to take on increasing responsibility for their own learning and participation (John-Steiner & Mahn, 1996). People can adopt new structures for thinking and acting when they are prompted by the use of tools or signs, or by collaborating with others (i.e., by undertaking a mediated activity such as mentoring) (Hopwood, 2016).

As novice teachers develop from learners of teaching to teachers of learners, they too are learners. The beginning teacher must learn to handle the complexities of managing a classroom, understand school culture, face the realities of working with students, communicate with parents, and interact with colleagues and administration. Vygotsky (1978) declared learning to be completely and inseparably blended with the process of development. In so much that novice teachers learn to teach, they also develop into professional teachers. As the teacher's own professional knowledge and skills develop (internal), something external can change (a classroom management issue) that alters the dynamic, and requires adaptation to reconfigure the mediated relationship between teacher and student (Hopwood, 2016). A positive mentor-mentee relationship is beneficial while tackling the many changes encountered in the first year of teaching while the new teacher is learning to be a professional teacher.

One basic theme of Vygotsky's (1978) theory is that social interaction plays a fundamental role in the process of cognitive development. Vygotsky stated that, "Every function in the child's development appears twice: first, on the social level and later on the individual level; first between people (inter-psychological) and then inside the child (inter-psychological)" (p. 57). Applied to the development of new teachers, this theme provides the foundation for the discussion of necessary social interaction among new teachers and their colleagues. The interaction can play a fundamental role in the process of new teacher development when it is deliberate, meaningful, and part of a comprehensive induction program with good quality mentors (Spooner-Lane, 2015).

Social isolation and alienation often characterize teaching. Many new teachers describe their work as solitary or as feeling lost at sea (Shernoff et al., 2011). Isolation among new teachers, along with other problems and issues, has become the focus of many effective entry, orientation, and support programs known as induction (Ingersoll, 2012). One component of new teacher induction suggests assigning mentors from the same teaching field to new teachers. Assigning a new teacher a mentor with detailed responsibilities ensures a level of social interaction that hinders a solitary introduction into the field of teaching.

Ehrich, Hansford, and Tennet (2001) provided a generic meaning of a mentor. They described the mentor as a father figure who guides and instructs a younger person. In the case of mentoring a new teacher, the father is the assigned mentor; usually a veteran teacher of 3 or more years, and the younger person is the novice teacher. As it relates to the main theme of the sociocultural learning theory, induction fosters every function of new teacher development: first, on the social level, the interaction between mentor and mentee through the exchange of thoughts, ideas, and experiences; and later, on the individual level, the self-reflection, application, and implementation of that which is learned.

Richter, Kunter, Klusmann, Anders, and Baumert (2013) conceptualized the goals of mentoring as instructional support, psychological support, and role-playing. Each of these goals supports the fundamental role of social interaction aspect of the Sociocultural Learning Theory as it applies to new teacher development. Offering instructional support fosters the development of the knowledge and skills needed to succeed in the classroom. This interaction includes assistance with lesson planning, classroom management advice, advice and feedback related to instruction, and assessing student work (Richter et al., 2013). Support of this nature will be seen later in its impact on the novice teacher's competence, quality of instruction, and student learning. Psychological support includes first working with the novice teacher to build confidence, encourage self-esteem, and enhance self-reliance (Richter et al., 2013). Psychological support is later seen in the individual well-being of the novice teacher as evident in terms of reduce stress and enhanced job satisfaction, which can reduce new teacher attrition (Richter et al., 2013). Role modeling is first seen as the beginning teachers observe their mentors' teaching and have an opportunity to analyze teaching from an external perspective using their own professional knowledge. Role modeling is later seen as insights into how to organize instruction and interact with students and even later as a more effective instructional plan and more meaningful interaction with students. Richter et al. (2013) also offered role modeling as a way of socializing the new teacher into the teaching community, while developing self-efficacy and learning how to act as a professional.

Bandura's Social Learning Theory and Teacher Self-Efficacy

Researchers generally credit Bandura (1977, 1986) for providing the theoretical framework for studying teacher efficacy (Coladarci, 1992). Bandura (1986) believed that one's self-efficacy is enhanced or raised in four basic ways: performance accomplishments, vicarious experiences, verbal persuasion, and various physiological states. Mastery experiences (i.e., successes or failures) which are generated in an actual classroom should have the strongest effect on teacher self-efficacy development, because these experiences provide genuine evidence of whether or not beginning teachers can accomplish the task in question, for example, independently teaching a class or following a lesson plan (Pfitzner-Eden, 2016). The induction/initial year of teaching offers many opportunities for vicarious experiences, especially if part of a comprehensive induction program. Observing classes of experienced teachers

provides beginning teachers with an opportunity for model learning. This is particularly beneficial for teacher self-efficacy development when several competent teachers can be observed overcoming difficult situations. If a mentor teacher supervises the induction year, the mentor would act as a strong source of verbal persuasion. The impact the mentor teacher can exert on the teacher self-efficacy development of beginning teachers depends on the perceived credibility of the mentor (Pfitzner-Eden, 2016). This credibility is high, when mentors are themselves competent teachers, are experienced in judging the accomplishments of different teachers, and are knowledgeable with regard to the task-related demands that new teachers face. The induction/initial year also offers the first authentic opportunity for new teachers to experience a range of physiological and affective states. Such indicators are particularly relevant in informing teacher self-efficacy beliefs, if the domain of functioning includes stressful or taxing situations (Pfitzner-Eden, 2016). Since the induction/initial year is considered to be a very stressful part of new teacher development, it carries the potential to negatively affect teacher self-efficacy development (Klassen and Durksen, 2014).

The concept of self-efficacy is grounded in Bandura's social learning theory (social cognitive theory), which postulates that human achievement depends on interactions between one's behavior, personal factors, and environmental conditions (Erdem & Demirel, 2007; Schunk & Pajares, 2002). Social learning theory also hypothesizes that individuals possess a self-evaluation system that allows them to exercise some control over their thoughts, feelings, and actions (Bandura, 1986; Elliot, Isaacs, & Chugani, 2010). Efficacy is not concerned with the skills that one has, but with the judgments of what one can do with whatever skills one possesses (Bandura, 1986).

Efficacy theoretically has two constructs. The first construct, self-efficacy, pertains to "people's judgment of their capabilities to organize and execute courses of actions required to

attain designated types of performances" (Bandura, 1986, p. 391). The second construct, outcome-expectancy, refers to one's "judgment of the likely consequence...a behavior will be produced" (Bandura, 1986, p. 391). Kivilcim, Toros, Miman, and Soyer (2013) defined self-efficacy as one's personal self-confidence in whether one will be successful against a situation or a problem or how one will tackle it. What people think, believe, and feel affects how they behave. Bandura believed teachers' perceptions in their ability to teach, teacher self-efficacy, and to influence student development positively, outcome-expectancy, are important influences in the classroom that affect student learning (Mayberry, 1971; Stryker & Szabo, 2009).

The Meyer and Allen Model of Organizational Commitment

The strength of any organization depends on the degree of commitment of its members (Fox, 1964). Commitment in general refers to one's level of involvement in the organization and describes an outcome in which one agrees with a decision or request and the effort to which an individual carries out this decision or request (Yukl, 2006). Commitment involves a psychological state that identifies the objects an individually closely associates with or desires to be involved with (Leithwood, Menzies, & Jantzi, 1994). Dannetta (2002) conceptualized commitment into three broad categories: commitment to the organization, commitment to the profession, and commitment to student learning. For the purpose of this literature review, the context in which commitment is analyzed and defined relates to teacher commitment to the profession of teaching and to the organization surrounding the profession.

Organizational commitment refers to the degree that an individual internalizes organizational values and goals and feels a sense of loyalty in the workplace (Kushman, 1992; Ware & Kitsantas, 2011). Porter, Steers, Mowday, and Boulian (1974) defined organizational commitment as an individual's identification with and involvement in a particular organization. Porter et al. later revised the definition as the relative strength of an individual's identification with and involvement in a particular organization (Bogler & Somech, 2004; Mowday, Steers, & Porter, 1979).

The concept of organizational commitment is based on three factors: identification, involvement, and loyalty (Bogler & Somech, 2004). Identification involves the acceptance of the organization's goals and values. Involvement refers to willingness to invest effort on behalf of the organization. Loyalty is the importance attached to keeping up membership in the organization. Teachers who have high organizational commitment exert more effort for the betterment of the school and are more likely to remain at the school (Collie et al., 2011; Park, 2005)

Meyer and Allen (1991) argued that organizational commitment need not be restricted to value and goal congruence. They argued that it could reflect a desire, a need, and/or an obligation to maintain membership in the organization (Meyer & Allen, 1991). The Meyer-Allen model conceptualizes commitment in the three approaches identified above as, affective, continuance, and normative commitment. These approaches view organizational commitment as a psychological state that characterizes the employees' relationship with the organization and has implications for their decision to continue or discontinue membership in the organization (Meyer & Allen, 1991). These definitions define Meyer and Allen's three-component framework for organizational commitment as they stated in their test of the model:

Affective commitment refers to the emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so. Continuance commitment refers to an awareness of the costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so. Finally, normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization. (p. 67)

Of the three components, normative commitment may be closely associated with the induction process. Meyer and Allen (1991) stated that the obligation to remain with an

organization results from the internalization of normative pressures. This felt obligation and internalization of pressures often begin with the socialization experiences and the observation of role models (Meyer & Allen, 1991). As it relates to the induction process, normative commitment may explain the socialization experiences that occur between mentor and mentee.

New Teachers

Good teaching is the most critical part of a solid education (Roth & Swail, 2000). Since the establishment of the first state normal school in 1839 by Horace Mann, the belief was that there could not be good schools unless there were good teachers (Smith, 1937). During that time, teachers were often certified to teach by local officials or they participated in a teacher preparation program offered as part of the high school curriculum. Teacher quality has long been an important issue for parents, educators, and policymakers (Roth & Swail, 2000). So much so, that by the 1870s, many of the newly created land-grant schools began establishing teacher preparation programs. As these programs began to increase and more public schools were formed, educational organizations became more active. One such organization was the National Education Association. The National Education Association began releasing specific competencies that each new teacher candidate had to fulfill prior to being awarded a degree and teacher licensure. State policymakers began adopting these competencies and required them as part of the teacher certification process.

Teacher Certification

There are two common routes to teacher licensure or certification, traditional and alternative. Classroom teachers are traditionally certified by states. Traditional certification typically refers to teacher candidates who have completed a teacher preparation program at a 4-year college or university, received a bachelor's or master's degree in education, and passed the required competency exam based on their major and coursework. The coursework is usually

characterized as having three components: liberal education, specialized-subject-field education, and professional education (Ornstein & Levine, 1997).

There are no uniform credentials for teacher preparation programs across the United States (Liang, 2011). A college or university confers an institutional recommendation on a student who has completed its teacher education program indicating preparation in elementary, secondary, or special education (Glass, 2008). The graduate takes this recommendation to the state agency that confers the certificate or license to teach.

The second route to certification is generally thought of as a program leading to a teaching certificate. It is designed for persons who have not earned a bachelor's degree or have not followed the traditional path to teacher preparation and training (Glass, 2008). *Alternative teacher certification program* is a term used to describe a variety of programs designed to train and credential teachers in an expedited fashion (Scribner & Heinen, 2009). These teacher candidates consist of a growing population of individuals who already have at least a bachelor's degree and considerable life experience and want to become teachers (Feistritzer, 1998).

Misconceptions About Teaching

Regardless of the route to certification, prospective teachers come to the classroom with preconceptions about how the world and teaching works (Hammerness et al., 2005). Lortie (1975) termed these preconceptions as an apprenticeship of observation, which leads to a number of misconceptions. These misconceptions include the teacher candidate believing that teaching is easy and that learning is the simple and rather mechanistic transfer of information from texts and teachers to students who acquire it through listening, reading, and memorization (Feiman-Nesmer & Buchmann, 1986). Learning to teach occurs in multiple stages during a teacher's career, not only in training programs at universities or colleges (Shayshon & Popper-Giveon, 2016). The notion that teachers learn to be teachers by working at schools is widely accepted, as

is the frequent tension between what teachers learn in their preparation programs and the schools that employ them (Hagger & McIntyre, 2006; Shayshon & Popper-Giveon, 2016). A beginning teacher's first year has long-term implications regarding their effectiveness, job satisfaction and career duration (Herbert & Worthy, 2001; McCormack & Thomas, 2003; Shayshon & Popper-Giveon, 2016). How the new teacher adapts to the school culture and, conversely, how school culture adapts to them, influences their professional stability significantly and often times offers confrontation with their positions or misconceptions held as preservice teachers (Cherubini, 2009).

These misconceptions can be connected to the most commonly used model of teacher developmental stages, the Katz model. In this model, Katz (2005) proposed that developmental stages are associated with teachers' training needs and the implications for the timing of training efforts and support. These four identified stages include survival, consolidation, renewal, and maturity and span the first 5 years of new teacher employment.

Moir (2011) more specifically noted several developmental phases during the first year of teaching. Teachers move from anticipation, to survival, to disillusionment, to rejuvenation, to reflection, and then back to anticipation (Moir, 2011). Each stage is loosely represented by the school year calendar (i.e., the survival phase lasts from September to November). In looking at the phases of the first-year teacher, one can better understand what may be happening throughout the school year and better provide the various levels of support to the new teacher (Lipton, Wellman, & Humbard, 2003).

Commitment to the Teaching Profession

The National Center for Education Statistics (NCES, 1997) contended that the degree of teacher commitment is one of the most important aspects of the performance and quality of school staff. The NCES defined commitment in general as the degree of positive, affective bond

between the teacher and the school. Teacher commitment to the profession is defined as a personal commitment to the job of teaching emphasizing fulfillment from exercising craft and a sense of relevance in one's work (Firestone & Rosenblum, 1988; Msila, 2013).

Coladarci (1992) defined commitment as the teacher's psychological commitment to the teaching profession. Erawan (2010) reported a close relationship between teacher efficacy and teacher commitment. Erawan argued that self-efficacious teachers are more likely to plan appropriate activities, persist with difficult learners, and find appropriate teaching material. Mowday et al. (1979) defined organizational commitment as exerting extra effort, desiring to remain with the organization, and sharing the values and goals of the organization. Mowday et al. described the phenomena of commitment as an individual's attitude toward an organization. Teacher commitment is closely associated with job satisfaction, morale, motivation, identity, and is a predictor of teachers' work performance, absenteeism, burnout, turnover, and student achievement (Day, Elliot, & Kington, 2005; Chan, 2006).

Using the NCES Schools and Staffing Survey, Singh and Billingsley (1998) reported that teachers' professional commitment was directly influenced through peer support (mentoring). In a study using results of the 1999–2000 Schools and Staffing Survey, Ware and Kitsantas (2007) found teachers' beliefs about how efficacious they were and how they were supported was related to their commitment to the profession.

Whittington and Knobloch (2003) conceptualized that teachers are committed to and are more likely to stay in the teaching profession based on their personal needs and goals related to their teaching jobs. Coladarci (1992) posited that commitment to teaching is examined in one of two ways. First, teacher attrition is studied. The disproportionate number of leavers and stayers can be measured by surveying former and current teachers (Coladarci, 1992; Darling-Hammond, 1984). The second way to study teacher commitment to teaching is to ask teachers if they would choose this profession if they had the decision to make over again (Coladarci, 1992). The NCES Staff and Schools Survey is typically used by researchers to assess teacher commitment. Coladarci's suggested question appears in this survey as a two-part question.

One of the most frequently used instruments to measure organizational commitment is the Organizational Commitment Questionnaire. The questionnaire uses 15 items to identify the three aspects of the Mowday et al. (1979) definition of organizational commitment: (a) acceptance of the organization's goals and values, (b) desire to remain in the organization, and (c) willingness to exert extra effort on behalf of the organization. Much of the existing empirical research on teacher commitment is related to retention. In their study of effects of teacher induction, Ingersoll and Strong (2011) concluded that almost all of the studies they reviewed showed that beginning teachers who participated in some kind of induction had higher satisfaction, commitment, or retention.

Induction

The National Association of State Boards of Education (Sun, 2012) reported that new teachers face a host of unique challenges upon entering the teaching profession. They must begin to translate theory into practice, develop classroom management skills, and overcome feelings of isolation (Sun, 2012). The application of Moir's phases of new teacher development would suggest that teachers face these challenges in the survival phase of their first year of teaching. According to Ingersoll (2012), between 40% and 50% of new teachers in the United States leave the profession within the first 5 years of teaching. The loss of a new teacher creates a financial loss for the school district and an academic loss that cannot be measured (Breaux & Wong, 2003; Gujarati, 2012).

Support to Reduce Attrition

Wong (2004) asserted that teachers hired today are the teachers for the next generation and therefore their successes determine the success of an entire generation of students. Efforts to improve student achievement boils down to what the teacher knows and can do in the classroom (Wong, 2004). As district level administrators approach the task of supporting this new generation of teachers and reduce teacher turnover during the first 5 years, they are relying on formal new teacher induction (Ingersoll, 2004). Formal teacher induction is regarded as an essential, cost effective investment in proactive measures to acculturate and retain new teachers (Alliance for Excellent Education, 2005; Danielson, 1999; Ingersoll, 2012; Smith & Ingersoll, 2004).

Induction is a comprehensive, coherent, and sustained professional development process organized by a school district to train, support, and retain new teachers (Wong, 2004). It is a multiyear process designed to acculturate new teachers in the academic standards, vision, and goals of the district (Wong, 2004). It is recommended that new teachers participate in this process to eliminate the sink or swim metaphor they often encounter, along with other difficulties of their first year (Howe, 2006). Induction programs are considered a bridge from a student of teaching to a teacher of students (Gilles, Carillo, Wang, Stegall, & Bumgarner, 2013).

High quality teacher induction can accelerate professional growth and teacher effectiveness, reduce teacher turnover, and improve student learning (New Teacher Center, 2007). However, Glazerman, Goldhaber, Raudenbush, Staiger, and Whitehurts (2010) presented contradictory research suggesting that many of the components of new teacher induction are not effective. Their executive summary stated that extra induction support does not translate into effects on classroom practices in the first year; teachers who received one year of comprehensive induction had no effect on student achievement; and teachers who received 2 years of comprehensive induction had no effect on student achievement in their first 2 years but had a positive and statistically significant effect on student achievement in the third year (Glazerman et al., 2010). Glazerman et al. also indicated that neither exposure to 1 or 2 years of comprehensive induction had a positive impact on retention or other workforce outcomes. Teachers in the Glazerman et al. study did not report being more satisfied or feeling more prepared to teach. There was no impact on teacher retention over the first 4 years of teaching in regards to retention in one school, one school district, or the teaching profession.

Effective Teacher Induction

Effective teacher induction provides support to new teachers over at least a 2-year period, includes opportunities for collaboration, provides professional development that is tailored to challenges faced by new teachers, and provides regular assessments of progress based on state or local teaching standards (New Teacher Center, 2007). No induction programs are exactly alike; each caters to the individual culture and specific needs of the school district (Wong, 2004). However, several components are common to most successful induction programs (Wong, 2004). The programs begin with an initial 4 or 5 days of induction before school starts; deliver a continuum of professional development training and study groups to foster networking, support, commitment, and leadership over a 2- or 3-year period; contain strong administrative support; provide mentoring as an integral component; present a model of effective teaching during inservice training and mentoring; and provide opportunities for inductees to visit demonstration classrooms (Wong, 2004).

An analysis of state policies on teacher induction by Goldrick et al. (2012) suggested there is much work to be done by policymakers to produce policies that support comprehensive new teacher induction. Goldrick et al. determined that 27 states require some form of induction support for new teachers, 22 require completion of or participation in induction for advanced certification, and 17 states provide dedicated funding for teacher induction. Only three states, Connecticut, Delaware, and Iowa, require schools and districts to provide multiyear induction support to beginning teachers, require the completion of induction to obtain a professional teaching certificate, and dedicate state funding to district induction programs.

Teacher induction is reported to make important contributions to new teachers' sense of efficacy and their professional growth (Wechsler et al., 2010). When states and districts provide a comprehensive induction program to its new teachers with the goals of developing and supporting new teachers effectively making a smooth transition into the teaching profession, several related outcomes follow (Sun, 2012). Improved teaching practice, improved student achievement, and reduced teacher turnover are a few of those outcomes. Ingersoll and Strong (2011) found that teachers who participated in induction performed better at keeping students on task, developing lesson plans, using effective questioning strategies, adjusting activities to meet student interests, maintaining a positive classroom environment, and demonstrating successful classroom management.

The New Teacher Center (Goldrick et al., 2012) developed 10 policy criteria (or standards) that help state and local school districts design and implement induction programs:

- 1. State policy should require that all new teachers receive induction support during their first 2 years in the profession.
- 2. State policy should require that all school administrators receive induction support during their first 2 years in the profession.
- 3. The state should have formal program standards that govern the design and operation of local teacher induction programs.
- 4. State policy should require a rigorous mentor selection process.

- State policy should require foundational training and ongoing professional development for mentors.
- State policy should address how mentors are assigned to beginning teachers, allow for manageable mentor caseloads, and encourage programs to provide release time for mentors.
- State policy should identify key induction program elements, including a minimum amount of mentor-new teacher contact time, formative assessment of teaching practice, and classroom observation.
- The state should provide dedicated funding to support local educator induction programs.
- The state should require participation in and/or completion of an induction program to advance from an initial to professional teaching license.
- 10. The state should assess or monitor program quality through accreditation, program evaluation, surveys, site visits, self-reports, and other relevant tools and strategies.

In the review of state policies, Standards 4, 5, and 6 are grouped together to form the mentor quality section of the review. Effective mentors are the heart of every high-quality induction program (Goldrick et al., 2012). Effective induction programs have mentoring as a core component, not as an exclusive one (Public Education Network, 2003). This important component of the induction process relies on the selection, training, ongoing support, and use of teacher mentors to make an induction program effective and instructionally supportive to new teachers (Goldrick et al., 2012).

Mentoring

Mentoring is a universal component of many induction programs whereby many new teachers are paired with experienced teachers (Richter et al., 2013; Wechsler et al., 2010).
Bullough (2012) asserted that mentoring is one of the most critical components of a comprehensive induction program. Stanulis and Ames (2009) referred to mentoring as being responsive to beginning teacher needs while challenging them to develop deeper thinking and asking them to consider new perspectives about the meaning of teaching effectively. Gilles et al. (2013) stated that effective mentors offer general, practical, pedagogical, and personal support. Mullen (2009) described mentoring as leading, teaching, and supervising. Giebelhaus and Bowman (2002) defined mentoring as a relationship in which a person of greater rank or expertise teaches, guides, and develops a novice. The New York State Education Department (2005) described mentors as coaches who teach, plan, and reflect on their teaching while directing teachers toward resources and providing assistance on student assessment, curriculum, instructional strategies, and classroom management. Ingersoll and Strong (2011) referred to mentoring as the personal guidance provided to beginning teachers in schools. Ganser (1996b) indicated that the mentor's role calls for knowledge and skills related to effective teaching, peer coaching, and serving as a cooperating teacher. Ganser (1996a) also defined mentoring as an activity that complements the professional development of the middle and later years of the veteran teacher's career.

The first years of teaching are often described as an especially stressful period in the socialization of beginning teachers (Fantilli & McDougall, 2009). Offering mentoring to new teachers as a part of their induction program can positively affect their transition into the teaching profession (Richter et al., 2013). The most effective induction programs proactively take into account several new trends, including the prominence of different types of beginning teachers, expansion of the routes leading to a teaching career, the role of mentoring in recruiting and retaining teachers, and the impact the relationship between mentor and mentee ultimately has

on self-efficacy, commitment, and student achievement (Ganser, 1996b; Ingersoll & Strong, 2011; Norman & Ganser, 2004; Richter et al., 2013).

While Ingersoll (2012) posited that students of teachers who participated in some type of induction had higher scores or gains on academic achievement tests, this study does not seek to answer the question, "Does mentoring new teachers affect student achievement?" Determining this relationship would require a true comparison control group of new teachers who do not receive mentoring (Adams, 2010).

Mentoring Programs and Policies

Although the overall objective of teacher mentoring programs may be similar, the character and content of these programs vary widely (Ingersoll & Strong, 2011). Duration and intensity may be different. Programs can vary from one single meeting between mentor and mentee to a structured program involving frequent meetings over a number of years where release time from normal teaching duties is offered. Some programs may limit the number of new teachers they serve to only teachers new to the profession, teachers new to a particular school, teachers new to the district with previous teaching experience, or a combination of characteristics (Organisation for Economic Co-Operation and Development, 2011).

Mentoring programs vary according to their purpose. Some are primarily developmental and designed to foster growth on the part of novice teachers, while others are designed to assess and weed out those ill suited for the profession (Ingersoll & Kralik, 2004). Mentoring programs vary as to how they select, prepare, assign, and compensate their mentors. How carefully mentors are selected is an issue for programs (Ingersoll & Strong, 2011). Many mentors are selected simply because they are lead teachers, veteran teachers of some distinction, or teachers with seniority (Athanases et al., 2008). Not all mentors have the understanding or skills to fulfill their training role to a high standard (O'Connor, Malow, & Bisland, 2011). Some programs include training for mentors; others do not. Some programs pay careful attention to the match between mentor and mentee; others do not. These matches include content, grade level, and geographical location, whether in the same school building or a school building nearby.

What kinds of induction and mentoring programs exist, and under what circumstances they help, are determined by policymakers at state and local levels (Ingersoll & Kralik, 2004). Mentoring as a component of an induction program is supported by different organizations at the local, regional, and state levels (Furtwengler, 1995; Ganser, 1996b). School districts may sponsor induction programs alone or in partnership with other districts or colleges and universities. The New Teacher Center (Goldrick et al., 2012) recommended that mentors be employed full-time, releasing them from all classroom teaching responsibilities. This allows for greater flexibility in daily schedules to meet, observe, and provide feedback to new teachers (Fletcher & Strong, 2009). Full-time mentors are free from balancing mentoring duties with full teaching loads. Employing full-time mentors allows the induction program to be more selective when choosing mentor candidates. Appendix A contains a review of state policies on teacher induction conducted by the New Teacher Center (Goldrick et al., 2012.)

Mentoring Programs in the Race to the Top Initiative

As part of the Race to the Top (RT3) Initiative of 2009, states were provided an opportunity to address the developmental needs of new teachers (Goldrick, Osta, & Maddock, 2010). States contending for RT3 Phase Two funds were to address teacher induction as a key part of their commitment to improving teacher effectiveness and student achievement (Goldrick et al., 2010). Forty-one states proposed approaches to strengthen new teacher support in their Phase 1 proposals. Illinois stated that each of its local education agencies would establish a 2-year induction program for all beginning teachers and would collaborate with the New Teacher Center and other organizations to build a high quality induction and mentoring program.

Louisiana proposed that all existing induction programs would be evaluated and redesigned as necessary. All new teachers in the state of Ohio would participate in the Ohio Teacher Residency Program for the first 4 years of teaching where they would be provided intensive supports through mentors, coaching, and professional development. Rhode Island's first- and second-year teachers would participate in a more systematic instructionally focused and data-driven coaching program modeled on the New Teacher Center (Goldrick et al., 2012). With the funds it would receive from the RT3 grant, Rhode Island would train 50 new mentors to provide one-on-one mentoring to approximately 450 core subject teachers in its high-need local education agencies (Goldrick et al., 2010).

Effective Skills of Mentors

In any of the induction and mentoring programs, an effective system of mentor selection, mentor training, and mentor assignment should be established with careful consideration being placed on professional skills, personal skills, instructional skills, educational background and experience, and commitment to mentoring (Alabama State Department of Education, 2004; Goldrick et al., 2012). Good mentoring, ongoing support, and thoughtful use of teacher mentors are critical to beginning teachers (Goldrick et al., 2012). The skills and abilities of an effective mentor are different from those of an effective classroom teacher and it is dangerous to assume that experienced teachers are proficient in these skills (Ganser, 1996b; Goldrick et al., 2012).

Ganser (1996a) asserted that effective mentoring requires expertise in conferencing, observing teaching, and problem solving. Specific conferencing skills include active listening and meditational questioning to promote reflection. In some programs, mentors are provided the opportunity to visit the novice teacher's classroom to provide feedback about teaching performance. Mentors should be provided with experiences in the systematic observation of teaching to include the use of checklists, rating scales, and open narratives to better facilitate the dialogue between mentor and mentee. Mentors should be assisted in developing problemsolving strategies to include defining a problem, gathering data, formulating a plan of action, implementing the plan, determining its impact, and re-examining the plan (Ganser, 1996a).

Beginning Teachers' Perceptions of Their Mentor-Mentee Relationship

Despite the many different definitions, when implemented properly, mentoring as a component of induction programs can promote early career teacher self-efficacy and commitment to the profession (Elliot et al., 2010; Fresko, Kfir, & Nasser, 1997; Ganser, 1996b). Ingersoll and Strong (2011) reported that beginning teachers who participated in some type of induction or mentoring program had a higher degree of commitment to the teaching profession based on self-reported intentions. They were unclear as to how closely these self-reported intentions were to actual retention behavior and stated that this measure most likely captured the teachers' degree of commitment rather than their longevity (Ingersoll & Strong, 2011). Elliot et al. (2010) provide results that suggested teachers who were provided induction or mentoring support are more likely to have improved self-efficacy and increased retention rates.

In many school districts across the United States, new teachers may not be participating in activities that help them feel supported. Many are mandated to take part in activities designed to support them; however, the new teachers do not perceive them as helpful. Several studies have been conducted that present the various approaches to providing support for beginning teachers with the focus on understanding the perception of the new teachers who experience them.

Clark and Byrnes (2012) examined the perceptions of 136 elementary school beginning teachers regarding the mentoring support they received during their first year teaching. Using the Mentoring Support Survey, the beginning teachers were asked to report the types of mentoring support they received and to rate the helpfulness of this support. The findings of this study demonstrated that beginning teachers perceived their mentoring support as mostly helpful. Beginning teachers who received both common planning time with a mentor and release time to observe other teachers rated the mentoring experiences they had as significantly more helpful than did beginning teachers who were not provided these mentoring supports. It was concluded that of the two (common planning time and release time), common planning time with their mentor was the most important type of support.

It is important to note that when asked about the assistance of their mentors supporting self-reflection and self-evaluation of teaching practices, beginning teachers reported them as not occurring often (Clark & Byrnes, 2012). When this type of support was offered, beginning teachers reported them as being less helpful than other forms of support. From this study, it was evident that beginning teachers prefer mentoring that helped meet immediate needs (Clark & Byrnes, 2012). Clark and Byrnes suggested that it is important to have a better understanding of the types of activities novice teachers perceive as most helpful in order to maximize the resources, time, and energy that go into mentoring programs. Therefore, exploring new teachers' perceptions of mentoring support where more is known about the school context and specifically how the administrator provides these structural supports is given as an implication for future study (Clark & Byrnes, 2012).

While a mentoring program can provide training and a mandatory schedule of activities, the true effectiveness of the program can only be determined by the experiences of the mentees (Roberson & Roberson, 2009). Five areas of concern were presented that warranted the particular concern of administrators and mentors. These areas of concern are identified as (a) relationships, (b) workload and time management, (c) knowledge of the curriculum, (d) evaluation and grading, and (e) issues of autonomy and control (Roberson & Roberson, 2009). In each area of concern, new teachers may ask several questions. For example, in the area of knowledge and curriculum, a new teacher may want to know what is important to teach. New teachers may wonder if their colleagues believe that they (the new teachers) know what they are doing. If these questions go unaddressed, unanswered, or new teachers perceive their administrators or mentors unwilling to facilitate connections to peers who can positively influence and support them, new teachers began to report feelings of uncertainty, anxiety, and frustration (Roberson & Roberson, 2009).

Hobson, Ashby, Malderez, and Tomlinson (2009) reviewed international research literature on mentoring beginning teachers to identify potential benefits of successful mentoring. For the most part, novice teachers perceived the mentoring support they received from their mentors as beneficial and positive (Hobson et al., 2009). Hobson et al. argued that the lived experiences of mentees are pivotal to understanding the process of the mentor/mentee concept. Hobson et al. also recognized that mentees' accounts could lack validity or credibility for various reasons. For example, research participants often seek social desirability and seek to present themselves in a favorable light in their interactions with researchers.

To add to the understanding of mentoring for beginning teachers, Oliver (2009) documented the experiences of mentee teachers. Novice teachers described their mentoring experience as very useful, asserting that their mentors helped them professionally by enhancing their teaching strategies and classroom management (Oliver, 2009). The mentees reported being enthusiastic about their participation with their mentors. This research noted particular appreciation of the mentors' expertise and guidance in reflecting and discussing classroom practice. Most saw the mentor as the biggest asset of the entire induction program, using such words as *amazing*, *wonderful*, *supportive*, *outstanding*, and *a friend* when they talked about their mentors (Oliver, 2009). Menon (2012) concluded that new teachers credit their mentors with their adjustment to the organizational setting and realities of the school, issues related to teaching all students effectively, managing the classroom, and the lack of a supportive and collaborative school culture. However, many of the beginning teachers reported that they deserved greater support and respect from their mentors. They believed that mentors failed to see them as individuals with their own preferences and limitations and treated them as they would treat more experienced colleagues (Menon, 2012). Menon suggested that mentors are considered more supportive if they extend their trust to those in need and through better and more frequent communication with beginning teachers.

The studies presented in this section highlighted a number of issues new teachers have about their mentoring experiences. These studies presented different aspects of induction. Each of these aspects of the mentor and mentee relationship deserves further investigation.

Teacher Self-Efficacy

The terms *teaching self-efficacy* or *teacher efficacy* have been used in the literature to refer to a teacher's belief in one's own ability to effectively influence student learning and bring about positive student change (Stryker & Szabo, 2009). Ross and Gray (2004) defined teacher efficacy as a set of personal efficacy beliefs that refer to the specific domain of teachers' professional behavior. Tschannen-Moran and Hoy (2001) defined teacher efficacy as a simple idea with significant implications as a judgment of one's capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated.

Cherniss (1993) suggested that teacher efficacy should consist of three domains: task, interpersonal, and organization. The task domain consists of the level of the teacher's skill in teaching, disciplining, and motivating students. Interpersonal domain involves the teacher's

ability to work harmoniously with others, including colleagues and direct supervisors. The organization domain is the teacher's ability to influence the social and political powers of the organization. In the context of the present study, the researcher dealt with the interpersonal domain as it most relates and encompasses the mentor-mentee relationship.

Chan, Lau, Nie, Lim, and Hogan (2008) found that teacher efficacy is a significant predictor of teacher commitment. Chan et al. examined the role of teacher efficacy and teachers' sense of identification with school. The results supported the hypothesis that teachers' identification with the school was related to teacher efficacy. Chan et al. proposed four ways school administrators could build teacher commitment: (a) clarifying mission, (b) having high quality leadership, (c) building cultural cohesion, and (d) providing a good reward system.

Teacher efficacy has been found to be one of the important variables consistently related to positive teaching behavior and student outcomes. Sridhar and Badiei (2008) studied 447 subjects to address teacher efficacy scores of primary school teachers in India and Iran. This study investigated the relationship between teacher efficacy and two variables, gender and years. Male teachers were found to have less personal efficacy than their female counterparts did. It was also found that experience seemed to contribute to the development of teacher efficacy (Sridhar & Badiei, 2008).

Efficacy affects teachers' investment in teaching, the goals they set, and their level of aspiration (Tschannen-Moran & Hoy, 2001). According to Tschannen-Moran (2001), teacher efficacy consists of three sub constructs: (a) efficacy for student engagement, (b) efficacy for instructional strategies, and (c) efficacy for classroom management. For the purpose of this study, the term *teacher efficacy* will not isolate any of the three sub constructs.

Teacher efficacy has been found to have a direct positive impact on students' success and attitude as well as the teacher's ability to develop positive attitudes for learning (Kivilcim et al.,

2013; Üstüner, Demirtaş, Cömert, & Özer, 2009). The purpose of the Kivilcim et al. (2013) study was to introduce a teacher self-efficacy scale into the scientific field to evaluate teachers' opinions of their self-efficacy. In order to determine the self-efficacy of teachers, the researchers developed an eight item, 5-point Likert scale. Upon reducing the scale to eight items from the initial 20 items, 50 teachers were surveyed who helped determine if the questions were comprehensible and if there were general problems regarding the questions. After the eight items were considered valid, 670 teachers were administered the scale. According to the findings obtained from the analyses of 500 completed scales, it was found that there were no inoperative items and all 8 items could be used for future testing. Results showed that the self-efficacy scale for teachers was more beneficial when it was given to a broader group of teachers.

Behavior differences have been noted between teachers with high teacher efficacy and low teacher efficacy, which results in the differentiation in students' behavior (Kivilcim et al., 2013). Students generally learn more from teachers with high teacher efficacy than from teachers with low teacher efficacy (Cakiroglu et al., 2005; Sridhar & Badiei, 2008). Cakiroglu et al. (2005) designed a study to compare the self-efficacy of future science teachers in one developed country and one rapidly developing country. The purpose of the study was to compare the self-efficacy of preservice elementary teachers at a large Turkish university and at a large midwestern university in the United States. The data for this study were collected by using Enoch's and Riggs' (1990) Science Teaching Efficacy Belief Instrument. The participants consisted of a sample of 100 Turkish preservice elementary teachers and an American sample of 79 preservice elementary teachers. The data were collected by convenient sampling. Results from this study indicated differences in personal teaching efficacy beliefs of the American and Turkish preservice teachers. Preservice elementary teachers in the United States had stronger personal science teaching efficacy beliefs than did Turkish preservice elementary teachers. Studies of teacher efficacy mostly focus on preservice teachers' self-efficacy. Gur, Cakiroglu, and Capa-Aydin (2012) conducted a study to examine the predictors of teachers' sense of efficacy. These teachers had 4 to 43 years of teaching experience. Data were collected from 383 science, mathematics, and classroom teachers using the Teachers' Sense of Efficacy Scale and additional items for assessing predictors including gender, teaching field, years of teaching experience, satisfaction with performance, support from colleagues, support from parents, support from administration, and teaching resources. Data were analyzed by using hierarchical regression analysis. Results showed that satisfaction with performance made a significant contribution to the efficacy of instructional strategies, efficacy of classroom management, and efficacy of student engagement whereas gender, teaching field, and years of teaching experience were not significant predictors of any of the dependent variables. Parental support and teaching resources predicted the efficacy of student engagement only.

Stryker and Szabo (2009) indicated that teachers' belief about what they are teaching is vital. Stryker and Szabo conducted a quantitative pre/post study that investigated if a content area-reading course affected alternative certification teacher candidates' self-efficacy beliefs and outcome-expectancy toward teaching reading. The teacher candidates were administered two instruments in this investigation: a background questionnaire and the Reading Teachers' Efficacy Instrument (RTEI). The RTEI was given to determine the candidates' beliefs about their ability to teach reading effectively. It also determined their beliefs about their ability to affect positively students' learning of reading. The background questionnaire and the RTEI were administered on the first day of the summer class. The RTEI was then given on the last day of class. Data from the RTEI indicated that the teachers achieved a higher mean score than they had at the beginning of the class. The difference in these scores were considered statistically significant indicating

that the alternative certified teachers felt more confident in their ability to teach reading effectively after the course.

Teachers with a high level of efficacy believe they can control or strongly influence student achievement and motivation (Erdem & Demirel, 2007). Teachers with a strong sense of efficacy exhibit greater levels of planning and organization, are more open to new ideas, and are more willing to experiment with new methods to meet better the needs of their students (Allinder, 1994; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977; Guskey, 1988; Stein & Wang, 1988; Tschannen-Moran & Hoy, 2001). Teachers with high teacher efficacy are more likely than low efficacy teachers to employ creative teaching strategies, persist with students, produce high efficacy learners, and are less likely to criticize students (Darling-Hammond, Chung, & Frelow, 2002; Forsbach-Rothman, Margolin, & Bloom, 2007).

The optimism of young teachers may be somewhat tarnished when confronted with the realities and complexities of teaching (Erdem & Demirel, 2007). Mentoring provides an opportunity for novice teachers to gather information about one's personal capabilities for teaching, face new challenges with some level of support, improve or enhance their teaching practices, develop and enhance their professional skills effectively and efficiently, and engage in reflective activities and professional conversations (Danielson, 1999; Erdem & Demirel, 2007; Saffold, 2005). Bandura (1977) believed that one's self-efficacy could be enhanced in four basic ways: through (a) performance accomplishments, (b) vicarious experiences, (c) verbal persuasion, and (d) various physiological states. The successful completion of a task or mastery of experiences with mentor support is important to enhance the confidence of teachers with little confidence in their own ability to perform the required task (Stryker & Szabo, 2009; Tschannen-Moran, 2001).

A mentoring program provides several vicarious observational experiences whereby the mentor models desired behaviors for the classroom. By seeing one's mentor succeed, the novice teacher might be encouraged to copy instructional strategies and teaching practices (Bandura, 1997; Weigand & Stockham, 2000). Mentors provide verbal persuasion in the form of encouragement by talking novice teachers through their insecurities and allowing them the opportunity to reflect and overcome their self-doubts (Bandura, 1977; Tschannen-Moran, Hoy, & Hoy, 1998). Mentors help novice teachers through various physiological states or reactions that can influence their teacher efficacy. When a novice teacher receives a negative evaluation, student achievement is questioned, or a lesson does not go as planned, a negative physiological impact (i.e., nausea, hyperventilating, and inability to eat) may ensue. Novice teachers' beliefs in their ability to perform that task will be significantly decreased (Stryker & Szabo, 2009).

There is no all-purpose measure of self-efficacy (Bandura, 2006). Research on teacher efficacy typically employs one or combinations of various efficacy scales, which all bear some semblance to Bandura's distinction between general and personal efficacy (Fives & Buehl, 2010; Tschannen-Moran & Hoy, 2001). In order to increase the possible influence of most teacher efficacy scales, researchers follow the guidelines provided by Bandura to develop self-efficacy scales (Bandura, 2006; Erdem & Demirel, 2007; Ozder, 2011; Tschannen-Moran & Hoy, 2001).

Bandura (2006) stated that perceived self-efficacy should be distinguished from other constructs such as self-esteem and locus of control because they are entirely different phenomena. The construction of self-efficacy scales should rely on a good conceptual analysis of the relative domain of functioning (Bandura, 2006). Using this guideline, the Tschannen-Moran et al. (1998) model of teacher efficacy suggests that a valid measure of teacher efficacy must assess both the domains of personal competence and an analysis of the task of teaching (Tschannen-Moran & Hoy, 2001).

Summary

There is increasing awareness that teachers need support during their induction into the profession (Cherubini, Smith, Goldblatt, Engemann, & Kitchen, 2008). High quality induction programs accelerate new teachers' professional growth, making them more effective faster (Goldrick et al., 2012). Comprehensive induction programs vary from state to state and district to district. Elements of a comprehensive induction program include multiyear support, high quality mentoring, common planning, ongoing professional development, and standards-based evaluation of new teachers.

Mentors provide psychological supports that build confidence, encourage self-esteem, and enhance self-reliance; thus, affecting the development of the knowledge and skills needed to succeed in the classroom (Richter et al., 2013). Effective mentoring contributes to the development of an individual's self-efficacy (Cherubini et al., 2008). Increased efficacy beliefs may be due to increased opportunities to practice specific techniques and having had the opportunity to receive feedback from mentors as part of an induction or mentoring program (Elliot et al., 2010). Understanding the connection between their self-efficacy, their commitment to teaching, and their perceptions of their mentors might provide information to enhance retention rates or retain qualified teachers in the schools that need them most (Elliot et al., 2010).

CHAPTER THREE: METHODS

The purpose of this correlational study was to identify the possible relationship between components of a mentor-based induction program on participants', new teachers', perceived self-efficacy, commitment to teaching, and perception of their mentor of a large urban school district. This chapter presents an overview of the research design and methods used to further explore this topic. The information presented here is reflective of the nature of quantitative research in that a research instrument aims to convert naturally occurring phenomena into quantitative data. In an attempt to determine if and to what extent relationships exist between new teachers' sense of teacher self-efficacy, the perceptions of their mentors, and their commitment to the teaching profession, this researcher chose to conduct a correlational study. In this chapter, the researcher elaborates on the procedures followed to accomplish the purpose of the study.

Design

A correlational research design is a specific type of nonexperimental design used to describe the relationship between or among variables. Correlational studies typically investigate a number of variables believed to be related to a major, complex variable (Gay, Mills, & Airasian, 2009). It provides empirical evidence suggesting two or more variables are or are not related. While this evidence does not establish causal relationships, it does contribute to a deeper understanding of the variables being studied and their relationship. For example, if high levels of student engagement have been shown to relate statistically to high levels of achievement, further research would need to be conducted to address questions related to the causal nature of this relationship as well as ways to influence higher levels of engagement. It is best to note that a high correlation between two variables does not imply that one causes the other; however, the existence of a high correlation permits prediction (Gay et al., 2009).

The design has two major forms, relational and predictive. In a correlational study, a researcher attempts to gain insight into variables or factors that are related to a complex variable (Gay et al., 2009). A prediction study is an attempt to determine which of a number of variables are most highly related to the criterion variable (Gay et al., 2009). For the purpose of this study, the researcher chose to conduct a relational study.

A relational study was designed for the current study with the basic intent being to explain the relationship–or association–between two or more variables (Girden, 2001). In the case of this study, the variables included perceived teacher self-efficacy, perception of the mentor-mentee relationship, and commitment to the teaching profession, all factors of participation in the more complex variable of new teacher induction. An examination of the relationship between these variables fit with the core definition and principles of a relational design. The choice in design was furthermore chosen because it could be extended to include more variables to describe more precisely the relationships among variables.

Gay et al. (2009) suggested five general characteristics associated with a relationship design. These are as follows:

- 1. Identify two or more variables to be correlated.
- Collect data from an appropriately identified population at a single point in time or within a relatively short period.
- 3. Analyze the data as a single group by correlating the scores for one variable with the scores for another variable; or scores for a number of variables are correlated with some particular variable of primary interest.
- 4. The result of the data analysis leads to a correlation coefficient that is reported and discussed in terms of strength, direction, and statistical significance.
- 5. Interpretations from the statistical results are drawn about the relationship.

This researcher chose a non-experimental method of data collection for the current study. The following steps were described and recommended by Lodico et al. (2006):

- 1. Select a topic based on experiences or situations that have occurred in the real world.
- 2. Identify variables by reviewing published literature on a specific topic of interest understanding that the independent variable is the experience or characteristic that differs between the groups studied that cannot be manipulated and the dependent variable is the variable that is impacted in some way by the independent variable.
- 3. Develop a research hypothesis or hypotheses that are similar to hypotheses developed for experimental research and should describe the expected impact of the independent variable on the dependent variable.
- 4. Select participants
- 5. Select instruments to measure variables and collecting data
- 6. Analyze and interpret results

As with all of types of quantitative research, correlational research requires researchers to select instruments that are reliable and allow researchers to draw valid conclusions. After a researcher has selected a reliable and valid instrument, data for the study can be collected. Gay, Mills, and Airasian (2006) recommended caution to researchers when reporting results especially when stating that the independent variable has caused a specific effect to occur. Because correlational research cannot definitively determine that one variable has caused something to occur, researchers are encouraged to report the findings of correlational studies as a possible effect or possible cause of an occurrence.

Related research of similar design suggested relationships between participation in an induction program and the variables presented in this study; however, studies detailing the possible relationship between these variables were limited. In a study that focused on the novice

teacher support, Zembytska (2016) suggested that mentoring and induction support allow school districts to reduce teacher turnover, improve student achievement, and promote collaboration within teaching staff and administration. Martin et al. (2016) concluded that elements of support that teachers perceived as beneficial included mentoring with educators with whom they had developed a relationship and trusted. Shayshon and Popper-Giveon (2016) examined beginning teachers' professional expectations and the disparity between their intentions of committing to the profession through the lens of three factors: positive conception of the educational system, isolation, and the induction process.

Research Questions

RQ1: What is the relationship between a new teacher's self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale)?

RQ2: Is there a difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching?

RQ3: Is there a difference in new teachers' perceived teacher self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching?

Hypotheses

 H_01 : There is no statistically significant relationship between new teachers' self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale).

 H_02 : There is no statistically significant difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching.

 H_03 : There is no statistically significant difference in new teachers' perceived teacher self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching.

Participants and Setting

The focus district in this researcher's study performs its state's annual program assessment twice a year, at mid-year and end-of-year. The results are tallied and sent to the program facilitator in the form of documents and attachments. The results are reviewed by the facilitator but are not synthesized for immediate use. The state program assessment is extensive, lengthy, and covers general information that may not be specific to the district's induction program. In addition, the state assessment does not provide information about new teachers' sense of efficacy or commitment to their organization.

According to its 2015 Quick Facts Sheet located on its website, the school district is located in the second largest and oldest city in the state, with a population of about 200,000. Almost half of the population (48%) is male and 51.6% is female. The median resident age is 33 years. The estimated household income is \$36,919. Estimated median home value is \$105,800. The median gross rent is \$769. Of the races represented in the area, 54% are identified as Black, 37% White, 5% Hispanic, 2% mixed, 2% Asian, 0.4% American Indian, and 0.3% other.

The district has a student population of 32,426 students, of which 70% are African American, 22% White, 1% Asian, 4% Hispanic, and 3% multicultural. Approximately 97% of the student population qualifies for free lunches and 22,000 students are transported by school buses. The graduation rate in 2013 was 58%. These statistics indicates that this school district

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enrolls large numbers of low-income students. The quartile level of poverty was unknown at the time of this study. There are 56 schools in the district, 8 high schools, 9 middle schools, 36 elementary schools, 4 magnet schools, 1 special school, and 1 charter school. There are 4,431 employees, 2,355 certified and 1,904 non-certified. Of the certified personnel, 27% have a 4-year bachelor's degree, 46% have a 5-year master's degree, and 27% have a 6-year specialist's degree. The district operates on a budget of \$243.8 million. All above statistics were reported on the district's homepage during the 2014–2015 school year.

Participants for this study included teachers who were classified as new teachers during the 2012–2013 and 2013–2014 school years. In addition to new teachers to the profession, teachers new to the state, school district, or grade level also received mentor support for at least a year to acclimate them to state, district, and school policies and norms. Six hundred-sixty teachers were invited to participate in the study.

Table 1 contains a description of the teachers in the sample. Almost half of the teachers were in Year 1 of the induction program (46%). Most of the teachers were female (88%) and were African American (45%) or Caucasian (49%). Eighty percent of the teachers had either a bachelor's or master's degree in education. Twelve percent of the teachers reported that they received a degree in a field other than education. Almost 80% of the teachers took the traditional approach to certification (college degree in education). More than half of the teachers taught in preK or elementary grades (59%). More than half of the teachers had 1 to 3 years of teaching experience (58%); however, 16% reported more than 10 years of teaching experience.

Instrumentation

The survey required participating teachers to answer questions using a combination of multiple-choice and Likert-scaled items (Appendix B). The survey contained questions

Table 1

Description of the Sample

Characteristic	n	%
Phase of induction		
Year 1	60	46.2
Year 2	28	21.5
Year 3	19	14.6
Completed induction	23	17.7
Gender		
Female	114	87.7
Male	16	12.3
Race/ethnicity		
Black/African American	58	44.6
Hispanic	1	0.8
White/Caucasian	63	48.5
Other	8	6.2
Highest degree		
BA/BS in education	51	39.2
BA/BS in other field	10	7.7
MA/MS in education	53	40.8
MA/MS in other field	6	4.6
Specialist (Ed.S)	6	4.6
Doctorate	4	3.1
Certification pathway		
Traditional	103	79.2
Teach for America	0	0.0
The New Teacher Project	4	3.1
Georgia TAPP	11	8.5
Other	12	9.2
Grade level		
PreK-Elementary	77	59.2
Middle	29	22.3
High	24	18.5
Years of experience (range $1 - 32$ years, $M = 5.42$, $SD = 6.2$)		
1 - 3 years	74	57.8
4 - 5 years	23	18.0
6 - 10 years	10	7.8
11 - 15 years	11	8.6
More than 15 years	10	7.8

addressing the teachers' sense of self-efficacy, perception of their mentor, and their commitment

to teaching. Demographic questions were also included.

Section 1 consisted of items related to the teachers' perception of their mentors' activities with them during the induction phase. It asked the teachers to rate the value of the activity provided by their mentor. This section also included two questions that asked if the teacher would return to teaching the next year and if the teacher planned to remain in the profession longer than 5 years. The labels used to describe mentor activity model those listed in the Georgia State Induction Phase Teacher Survey but are not representative of the survey in its entirety. These items were used because of the survey's close alignment to the Georgia Induction Guidance and Teacher/Leader Assessment of Performance Standards. Using this survey, the executive secretary of Georgia's Professional Standards Commission reported that 44% of the state's public-school teachers leave education within the first 5 years of employment (Owens, 2015).

The Georgia Department of Education sought to understand better teachers' perspectives by sending the survey to Georgia public school teachers on the website SurveyMonkey.com. There was a significantly high response rate with over 53,000 responses within 3 weeks. The distribution was evenly spread across elementary (26,603 surveys), middle (11,989), and high school teachers (13,773). The number of responses based on years of experience and geography was reported as consistent with the workforce in Georgia (Owens, 2015).

According to a report by the Georgia Department of Education Teacher and Leader Effectiveness Induction and IHEs Program Specialist, The Georgia New Teacher Induction Guidance uses the National Center for Educational Statistics School and Staffing Survey (2011) in combination with the Teacher Efficacy Survey (Owen, 2015). Teacher induction should address those conditions that cause teachers to leave: those things range from poor leadership, lack of collegial support, to feelings of isolation, to dissatisfaction with growth potential, to school safety (Georgia Department of Education, 2012). Most beginning teachers receive insufficient on the-job support during their initial years in the profession. The basis of the state induction document is to provide guidance for Georgia districts and schools to create, implement, and sustain a quality induction program that supports not only retention, but also the induction phase teacher's growth, thereby increasing student learning (Georgia Department of Education, 2015). Moir (2011), executive director of the New Teacher Center stated that when districts and schools organize to accelerate new teacher development, they break the cycle of inequity and provide children who are most in need of a quality education with teachers capable of helping them.

Section 2 contained items pertaining to teachers' sense of efficacy, measured by 24 items of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). Respondents answered each question using a 9-point Likert scale ranging from 1 (*none at all*) to 9 (*a great deal*). A total score was computed by finding the mean of the responses across all items. A high score indicated a higher perception of efficacy. Tschannen-Moran and Woolfolk Hoy (2001) reported reliability of $\alpha = .94$. Permission to use this survey was granted to the public via the College of William and Mary's public webpage (Appendix C).

Section 3 consisted of questions that gather demographic data about the participant. These questions asked participants to provide their age, gender, race/ethnicity, highest degree earned, years of teaching experience, certification, and grade level taught. These data were used to describe the sample.

Procedures

Initial contact with the district's director of professional learning and school improvement was made in December of 2013. This contact was in person referencing the procedures to conduct a study in the district. Contact with the district's director of student services led to the researcher receiving the formal packet to conduct research in the district. This

packet could not be finalized until institutional review board (IRB) approval was given from Liberty University. After IRB approval was granted from Liberty University (Appendix D), the packet requesting permission to conduct research in the district was submitted to the coordinator of assessments and research. The packet suggested that researchers allow 2 to 3 weeks for feedback regarding the approval or denial to conduct research. After approximately 3 months with several phone calls, emails, and in-person visits to the student services office, concern about the wait time and lack of communication between the research approval committee and researcher led to an email expressing concern to the assistant superintendent of curriculum, instruction, and technology. The day after this email was sent, an apology letter was received from the director of student services. Later that day, an email granting permission to conduct research was sent from the director of student services (Appendix E). The district's director of professional learning and school improvement provided a list of names and email addresses. This information was used to contact potential participants via email seeking their involvement in the Teacher Efficacy, Commitment, and Perception of Mentor Survey.

The initial email invitation (Appendix F) included an introduction to the study and contained a link to the online survey. The first page of the survey was a consent form (Appendix G) explaining that the information the teachers provide was confidential. By clicking on *YES* at the bottom of the consent form, each participant provided consent to participate in the study.

The data were gathered during a 2-week period. During that time, teachers involved in the induction phase at the time and former induction program participants received the initial email invitation. Two follow-up emails were sent to non-respondents on Friday of the first week and Thursday of the second week. Data collected during this time were stored at the online survey and were downloaded for data analysis. The researcher received several emails expressing completion of the survey. Responses informing the researcher of participants' completion of the survey was not solicited nor required. The researcher responded cordially to each participant who emailed in regard to completion. One disturbing email was received referencing refusal to participate in the study. This email was forwarded to an assistant superintendent in the district for review.

Data Analysis

The data collected from the survey process was entered into the Social Sciences Statistical Package. Descriptive statistics were used to describe the sample's demographics and work descriptors, the questionnaire's individual items, and the scale scores. A self-efficacy score was calculated by finding the mean of the responses across the 24 items of the Teachers' Sense of Efficacy Scale. Perceptions of mentoring scale score was calculated by finding the mean of the responses across the 10 items of the mentor activity scale. The sample was divided into uncommitted and committed teachers based on their response to one question: *Do you plan to stay in education beyond the next 5 years*? Teachers who responded *Don't know* and *No* were coded 0 (uncommitted); while teachers who responded *Yes* were coded 1(committed).

Three null hypotheses were tested. All hypotheses were tested at the alpha level of α = .05. Null Hypothesis 1 examined the relationship between teacher self-efficacy and perceptions of mentoring. Assumptions of correlation were tested using histograms to examine the normality of the distributions, box plots to look for the presence of outliers, and Q-Q plots to determine linearity. Assumptions were not met for each variable. Therefore, the nonparametric Spearman's *rho* was used to determine the relationship between the two variables.

Null Hypothesis 2 and 3 examined the differences between uncommitted and committed teachers on teacher self-efficacy and perceptions of mentoring. Assumptions of the *t* test were examined using histograms and Shapiro-Wilk's test of normality and Levene's test for equality

of variances between the two groups. One variable, teacher self-efficacy, did not violate the assumptions of the t test. However, perception of mentoring did violate the assumptions. In lieu of the t test, the nonparametric test Spearman's *rho* was used to determine differences between uncommitted and committed teachers.

Summary

In an attempt to determine if and to what extent relationships existed between induction phase teachers' sense of efficacy, their perceptions of their mentors, and their commitment to teaching, this researcher chose to conduct a descriptive correlational study. An online survey of teachers who were classified as new teachers during the 2012–2013 and 2013–2014 school years was conducted. The survey contained items addressing the teachers' sense of self-efficacy, perception of their mentor, and their commitment to teaching.

CHAPTER FOUR: FINDINGS

A sample of 130 teachers who responded to an online survey was used to answer three research questions created to determine the effects of a mentor-based induction program as it relates to new teachers' perceived self-efficacy, commitment to teaching, and perception of their mentor. The analyses found no statistically significant relationship among the teachers' perceptions of their mentors and their teaching self-efficacy, nor between the teachers' perceptions of their mentors and their commitment to teaching. However, teachers who indicated they intended to teach for more than 5 years had higher teacher self-efficacy than teachers who were not as committed to teaching.

Research Questions

RQ1: What is the relationship between a new teacher's self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale)?

RQ2: Is there a difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching?

RQ3: Is there a difference in new teachers' perceived teacher self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching?

Hypotheses

 H_01 : There is no statistically significant relationship between new teachers' self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale).

 H_02 : There is no statistically significant difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching.

 H_03 : There is no statistically significant difference in new teachers' self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching.

Descriptive Statistics

An online survey of teachers who were classified as new teachers during the 2012–2013 and 2013–2014 school years was conducted. Email invitations were sent to 660 teachers identified by the school system as having participated in the mentor induction program. Almost 300 teachers used the link to access the survey; however, only 220 clicked *YES* at the bottom of the consent form and provided their consent to participate in the study. Of those 220 teachers, 141 continued to the end of the questionnaire. One hundred thirty teachers provided enough answers to calculate the variables of interest for analysis of the research questions. This sample of 130 was used to report the results.

The data collected from the survey process was inputted into the Social Sciences Statistical Package. Descriptive statistics were used to describe the sample's demographics and work descriptors, the questionnaire's individual items, and the teacher self-efficacy and perceptions of mentoring scales. The self-efficacy scale score was calculated by finding the mean of the responses across 24 items. Perceptions of mentoring scale score was calculated by finding the mean of the responses across the 10 items of the mentor activity scale. Two groups of teachers were identified by their response to whether they plan to stay in education beyond the

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next 5 years. Teachers who indicated *yes* were coded 1 (committed to teaching) and those who indicated *No* or *Don't Know* were coded 0 (not committed to teaching).

Cronbach coefficient alpha was obtained for each scale in the analysis (see Table 2). The reliability of each scale was $\alpha = .96$. The values indicated an acceptable reliability (Creswell, 2013; Moustakas, 1994).

Table 2

Reliability of the Scales

Scale	# of items	Cronbach's alpha
Perception of mentor	10	.96
Teacher self-efficacy	24	.96

Assumption Tests

Data screening was conducted on the self-efficacy and perceptions of mentoring variables to determine if they met the assumptions of correlation. The histograms, plots, and box plots for self-efficacy and perceptions of mentoring show how the two scale scores met the assumptions of correlation (absence of outliers, normality of variables, linearity, and homoscedasticity).

Self-Efficacy

Normality of the distribution of the self-efficacy scores was tested using the Shapiro-Wilk test, F(130) = .98, p > .05 and a histogram (See Figure 1). Absence of outliers was determined using a box plot (See Figure 2) and linearity was shown using a Q-Q plot (See Figure 3). Teacher self-efficacy did not violate the assumptions of correlation.



Figure 1. Histogram of teacher self-efficacy scores.



Figure 2. Box plot of teacher self-efficacy scores.



Figure 3. Q-Q plot of self-efficacy scores.

Perception of Mentor

Normality of the distribution of perceptions of mentoring scores was tested using Shapiro-Wilk, F(130) = .89, p < .01 and a histogram (See Figure 4). A box plot showed an absence of outliers (See Figure 5) and a Q-Q plot showed a lack of linearity (See Figure 6). Although no outliers were found, this variable violated the assumptions of correlation.



Figure 4. Histogram of perceptions of mentoring scores.



Figure 5. Box plot of perceptions of mentoring scores.



Figure 6. Q-Q plot of perceptions of mentoring scores.

The perceptions of mentoring variable was not normally distributed nor was it linear. Therefore, a non-parametric measure of association (Spearman's *rho*) was used to test Null Hypothesis 1. The Spearman *rho* can be used if the data do not meet all of the assumptions of the more general Pearson correlation procedure, such as linearity (Green & Salkind, 2012).

Differences Between Uncommitted and Committed Teachers

Additional screening was conducted to determine if the groups (committed and uncommitted teachers) used to test Null Hypotheses 2 and 3 met the assumptions of the *t* test. The assumptions include an interval or ratio scale of measurement, random sampling from a defined population, independent samples, normally distributed scores, and equal variances. The variables used in the null hypotheses (teachers' self-efficacy and perceptions of mentoring) were interval and came from a sample of first-year teachers. The two groups did not overlap and thus were independent samples. Teachers' self-efficacy was normally distributed in each group (See Figure 7) and the variances were equal (See Table 3). However, perceptions of mentoring was not normally distributed (See Figure 8) and the variances were not equal (See Table 3).



Figure 7. Distribution of teacher self-efficacy by uncommitted teachers (left) and committed teachers (right).



Figure 8. Distribution of perceptions of mentoring by uncommitted teachers (left) and committed teachers (right).

Table 3

Tests for Assumptions of t Test

Test	Statistic	Significance
Levene's test for equality of variances		
Teacher self-efficacy	0.58	.45
Perception of mentor	4.53	.04
Shapiro-Wilk test of normality		
Teacher self-efficacy		
Uncommitted teachers $(n = 37)$	0.98	.72
Committed teachers $(n = 93)$	0.98	.15
Perception of mentor		
Uncommitted teachers $(n = 37)$	0.91	< .01
Committed teachers $(n = 93)$	0.87	< .01

One variable, teacher self-efficacy, did not violate the assumptions of the t test; therefore, a t test was used to test Null Hypothesis 3. However, perceptions of mentoring did violate the assumptions. In lieu of the t test, the nonparametric Mann-Whitney test was used to determine differences between uncommitted and committed teachers in Null Hypothesis 2.

Results

Table 4 contains a description of the teachers' responses to whether they planned to stay in education beyond the next 5 years. Two groups were formed based on the teachers' responses to one question: *Do you plan to stay in education beyond the next 5 years*? Seven out of 10 teachers reported that they planned to stay in education more than 5 years.

Table 4

Commitment to Teaching

Plan to stay in education beyond the next 5 years	п	%
Yes (committed)	93	71.5
No (uncommitted)	37	28.5

Teacher self-efficacy was calculated using the teachers' responses to the items in the Teachers' Sense of Efficacy Scale. Perception of mentor was calculated using the teachers' responses to the items in the mentor activity scale. Table 5 contains a description of the variables used to answer the research questions. Teachers, on average, rated their self-efficacy high (M = 7.11). Their perception of their mentor was average (M = 2.50).

Table 5

Means and Standard Deviations of the Variables Used to Answer the Research Questions

Variable by group	п	Range	М	SD
Perception of their mentor	130	0-4	2.50	1.25
Uncommitted teachers	37		2.26	1.29
Committed teachers	93		2.59	1.23
Teacher self-efficacy	130	5–9	7.11	1.03
Uncommitted teachers	37		6.68	1.10
Committed teachers	93		7.28	0.95

Null Hypothesis 1

 H_01 : There is no statistically significant relationship between new teachers' self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale).

The nonparametric test Spearman's *rho* was used to assess the relationship between teachers' perceptions of their mentors and their teaching self-efficacy. The results found a low and not statistically significant correlation between the two variables, ρ (130) = .08, p > .05. The null hypothesis was not rejected. There was no statistically significant relationship between beginning teachers' teacher self-efficacy and their perceptions of their mentors in this sample of teachers.

Null Hypothesis 2

 H_02 : There is no statistically significant difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching.

Because perception of their mentor was not normally distributed, a nonparametric test, the Mann-Whitney, was used in lieu of the t test. No significant difference was found between the groups, U = 1465.00, $n_1 = 37$, $n_2 = 93$, p > .05. Therefore, the null hypothesis was not rejected. There was no statistically significant difference in teachers' perception of their mentor between those who are committed to teaching and those who are not committed to teaching.

Null Hypothesis 3

 H_03 : There is no statistically significant difference in new teachers' self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching.

The dependent variable, perceived teacher self-efficacy, was normally distributed; therefore, an independent samples *t* test was used to determine if a difference existed in perceived teacher self-efficacy between uncommitted and committed teachers. A statistically significant difference was found between the two groups, t (128) = -3.11, p < .01. Therefore, the null hypothesis was rejected. There was a statistically significant difference in teacher selfefficacy between uncommitted and committed teachers. Committed teachers reported higher teacher self-efficacy (M=7.28) than uncommitted teachers (M=6.68). A medium effect size was found (d=.58).
CHAPTER FIVE: CONCLUSIONS

The purpose of this correlational study was to determine the effects of a mentor-based induction program as it relates to new teachers' perceived self-efficacy, commitment to teaching, and perception of the relationship with their mentor at a large urban school district in the southeast that can be reasonably determined to enroll large numbers of low income students. Because mentoring is a major component of the induction process, it is important to obtain and analyze teachers' perceptions of how mentor-mentee interactions affected different factors of their teaching practice. Currently there is little literature that focuses specifically on the perceptions new teachers have based on their involvement in the induction process (Jedlicka, 2015; Portelli et al., 2010). This study was conducted to determine the existence of relationships between three specifically identified variables as part of the complex variable, a teacher induction program. This chapter contains a discussion of the results of this research, conclusions drawn from the findings, an examination of the theoretical and practical implications of the results, and recommendations for further research.

Discussion

Data were collected from an online survey of teachers classified as new teachers during the 2012–2013 and 2013–2014 school years. The survey contained items addressing the teachers' sense of self-efficacy, perception of their mentor, and their commitment to teaching. Three research questions were developed for the study. The data collected were analyzed to answer those questions.

Research Question 1

RQ1: What is the relationship between a new teacher's self-efficacy, as measured by the Teachers' Sense of Efficacy Scale, and the perception of their mentor (as measured by the mentor activity scale)?

The analysis of the data showed a low, statistically insignificant relationship between the teachers' perceptions of their mentors and their perceptions of self-efficacy. The results from this survey contrast with previous research by Elliot et al. (2010) that suggested teachers who were provided induction or mentoring are more likely to have improved self-efficacy and increased retention rates. Although the teachers in the current study were mandated to take part in mentoring designed to support them, respondents indicated that they did not perceive the support as helpful. When Clark and Byrnes (2012) asked new teachers how their mentors supported self-reflection and self-evaluation of teaching practices, beginning teachers reported them as not occurring often. Clark and Byrnes also reported that the teachers considered support from mentors as less helpful making it evident that beginning teachers prefer mentoring that helps meet immediate needs.

The school district that was the focus of this study provides mentors to novice teachers to assist them in becoming reflective practitioners of teaching. Forms must be completed and submitted that document reflection of teaching either experienced by the novice teacher or observed by the mentor teacher. The program offers limited and often inconsistent opportunities for mentors to provide assistance and support with immediate needs such as locating materials and facilitating knowledge of the curriculum. Roberson and Roberson (2009) purported that this type of mentoring, one that provides the support of an experienced teacher or mentor, can cause questions that new teachers want to ask to go unaddressed or unanswered leading to feelings of uncertainty, anxiety, and frustration. Hobson et al. (2009) argued that these lived experiences of mentees are pivotal to understanding the process of the mentor/mentee concept.

Clark and Byrnes (2012) suggested the importance of understanding the types of activities novice teachers perceive as most helpful. If mentoring, the pairing of new teachers with experienced teachers, is the only or main activity offered in an induction program, as it is in the case in this study, it stands to reason that novice teachers would feel less efficacious than novice teachers participating in an induction program where more activities are included. Mentoring is one of the most critical components of a comprehensive induction program but should not just be the pairing of new teachers to experienced teachers (Bullough, 2012). Mentoring should be a response to the needs of beginning teachers at the same time challenging them to develop deeper thinking and consider new perspectives about the meaning of effective teaching (Stanulis & Ames, 2009).

Research Question 2

RQ2: Is there a difference in new teachers' perception of their mentor (as measured by the mentor activity scale) between those who are committed to teaching and those who are not committed to teaching?

The results of the survey showed no statistically significant difference between uncommitted and committed teachers on their perception of their mentor. The National Center for Education Statistics (1997) reported that the degree of teacher commitment is an important part of the performance and quality of school staff. Teacher commitment to the profession is defined as a personal commitment to the job of teaching, emphasizing fulfillment from exercising craft and a sense of relevance in one's work (Msila, 2013). Singh and Billingsley (1998) reported that teachers' professional commitment was directly influenced through peer support (mentoring).

The results of the current study are inconsistent with Chuan's (2008) report where it was concluded that there is a significant association between collegial support and professional commitment. Half of the teachers (50%) surveyed in the current study indicated that their commitment to teaching was *not at all* related to the mentor support they received during induction. This response was similar across years of experience. The *not at all* responses were

at or above 40% in all ranges of experience. According to Ingersoll (2012), between 40% and 50% of new teachers in the United States leave the profession within the first 5 years of teaching. Glazerman et al. (2010) reported that neither exposure to 1 or 2 years of comprehensive induction had a positive effect on retention or other workforce outcomes. If applying the same deduction, there might be a similar effect on teacher retention in the school district in the current study as in the Glazerman et al. study.

Research Question 3

RQ3: Is there a difference in new teachers' perceived teacher self-efficacy (as measured by the Teachers' Sense of Efficacy Scale) between those who are committed to teaching and those who are not committed to teaching?

The analysis showed a statistically significant, difference between uncommitted and committed teachers and their perceptions of self-efficacy. Committed teachers reported higher teacher self-efficacy than uncommitted teachers. Chan et al. (2008) found that teacher efficacy is a significant predictor of teacher commitment. The effect size was medium, therefore results of the current study are significant enough to validate the Chan et al. study.

Implications

The implementation of teacher induction and mentoring programs aimed at improving teacher support and lowering teacher attrition has steadily increased across the United States (Carver & Feiman-Nemser, 2009). Supporting beginning teachers and providing a high-quality teacher induction program can accelerate professional growth and teacher effectiveness, reduce teacher turnover, and improve student learning (New Teacher Center, 2007). However, Glazerman et al. (2010) suggested that many of the components of new teacher induction are not effective. The findings of this research would agree with those found by Glazerman et al.; thereby, positing that there is some indication that the activities of the current induction program

are having less than their desired effect. As it stands to date, the induction program of the study's focus is a 3-year program that focuses on support of first-year teachers by providing them with mentors and professional development in their first year, then lesser and infrequent professional development in Years 2 and 3. Therefore, it can be reasonably concluded that the current induction program has components that are not effective. Furthermore, predictions can be formulated from this study, as in the Glazerman et al. study, that the induction program in the current study will have no impact on teacher retention over the first 4 years of teaching in the school district. It can also be surmised that while there is small statistical significance, the interactions between mentor and mentee are not yielding teacher with high levels of teacher self-efficacy.

Kearny (2016) identified nine elements that have been identified as characteristics of effective induction:

The one- to two-year mandated program that focused on teacher learning and evaluation; the provision of a mentor; the opportunity for collaboration; structured observations; reduced teaching and/or release time; intensive workplace learning; beginning teacher seminars and/or meetings; professional support and/or professional networking; and part of a program professional development (pg. 8).

The induction program that this study focused on included three: the provision of a mentor, the opportunity for collaboration, and beginning teacher seminars and/or meetings. By not addressing or including all nine of Kearny's suggested nine elements, it can be concluded that the leaders of the program presented here misconceptualized induction as either orientation and/or mentoring only, instead of the primary phase in a continuum of professional development leading to the teachers' full integration into a professional community of practice and continuing professional learning throughout their career (Kearney, 2016). It can also be concluded that this misconception of induction impacted teacher self-efficacy of committed and non-committed teachers in this sample as it is related to their perceptions of their mentors.

Effective teacher induction provides support to new teachers over at least a 2-year period, includes opportunities for collaboration, provides professional development that is tailored to challenges faced by new teachers, and provides regular assessments of progress based on state or local teaching standards (New Teacher Center, 2007). While induction programs vary from district to district, several components are common to most successful induction programs (Wong, 2004). Successful programs begin with an initial 4 or 5 days of induction before school starts; deliver a continuum of professional development training and study groups to foster networking, support, commitment, and leadership over a 2- or 3-year period; contain strong administrative support; provide mentoring as an integral component; present a model of effective teaching during in-service training and mentoring; and provide opportunities for inductees to visit demonstration classrooms (Wong, 2004).

At the time of this study, this new teacher induction program possessed few, but not all components suggested. The program begins with an initial 3 days of orientation before school starts, delivers professional development training to mentors who are responsible for redelivering learned information to new teachers over a 1-year period, contains minimal administrative support, and provides mentoring as its main component. The induction program, set up as a mentoring program, appears to have a no significant difference between on commitment, with approximately 50% of teachers reporting that their mentor had no impact on their commitment to teaching. A negative effect is concluded because mentors having no impact on commitment to teaching indicates that the mentors lack the most effective aspects of mentoring to include encouragement, opportunity to reflect on practice, support of risk taking, and a supportive school environment (Burke et al., 2015). From the suggestions of Spooner-Lee (2016), specific features of this mentoring program's activities should be revised to provide specific processes for mentor matching based on grade or other demographics, reduce the variability in mentor-mentee

interaction, and provide further training to mentors to assist them in providing quality interaction and activities with their mentees.

Wechsler et al. (2010) found that teacher induction makes important contributions to new teachers' sense of efficacy and their professional growth. Ingersoll and Strong (2011) found that teachers who participated in formalized induction programs showed better performance in the areas of keeping students engaged or on task, developing meaningful lesson plans, employing effecting questioning strategies, adjusting activities to meet the interests and needs of their students, and maintaining order in their classrooms by providing a positive classroom environment with effective classroom management strategies. However, the current study provides evidence that teachers do not feel efficacious in classroom management.

Giebelhaus and Bowman (2002) defined mentoring as a relationship in which a person of greater expertise teaches, guides, and develops a novice. From the results of this study, it can be surmised that the mentors of the induction program are lacking in forming relationships with, teaching, guiding, or developing the novice teachers assigned to them. These mentors are failing to have a positive effect on their mentees' transition into the teaching profession.

In conclusion, this research has made a theoretical contribution to the growing interest on quality teacher induction programs. By investigating the impact of mentoring on teacher self-efficacy it has provided empirical evidence on the importance of delivering new teachers an induction program that addresses and provides support for the many needs of a novice teacher. The investigation of new teachers' perceptions of their mentors provides empirical evidence to the importance of adjusting a program to address better the needs of its novice teachers from the perspective of the novice teacher. Novice teachers move through the different phases of new teacher development at different rates. It is important that induction program designers

understand how to provide the necessary support to the teachers in its programs by taking into consideration their interactions with the mentors they are assigned.

The contribution of empirical evidence of this study also provides the necessary details of the importance of soliciting input of novice teachers in the form of their perceptions of their mentors. Induction programs often assign mentors to novice teachers, but generally do not evaluate the effectiveness or impact of the mentors on their mentees. The relevance of this input is necessary and should not be overlooked. It is imperative that induction program leaders understand that the match it makes between mentor and novice teacher is one that could potentially have a strong positive or negative impact on the new teacher. With the assistance of a perceived compassionate, understanding, trained and quality mentor, the novice teacher is more likely to commit to teacher for a longer period that a novice teacher who does not perceive his mentor positively.

Commitment to teaching is a component of teacher induction that is often viewed as secondary to providing support and guidance. Commitment to teaching should be regarded as a long-term goal of an induction program. As reducing teacher attrition becomes more a focus in many school districts across the nation, leaders must understand and plan with the end goal of commitment to teaching in mind. All components of a quality teacher induction program should work together to welcome new teachers to the profession and get them to commit to more than the average 3 to 5 years.

Effective and ongoing induction is widely held as one of the most worthwhile practices to ease the transition from university to into the profession and counteract difficulties faced by beginning teachers (Kearney, 2016). The most effective induction programs are those that proactively consider the different types of beginning teachers, the varying routes that lead to a teaching career, the role that mentors play in recruiting and retaining teachers, and their ultimate

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effect on self-efficacy, commitment, and student achievement (Ingersoll & Strong, 2011; Norman & Ganser, 2004; Richter et al., 2013). This study focused specifically on the effect the relationship between mentor and mentee has on self-efficacy and commitment to teaching. The results of the current study support the notion that there is a need to review the district's induction program. The results of this study should be used by district level administrators to evaluate the level of support they provide to new teachers during the induction years. The program may benefit the introduction of a researcher to its advisory board. This researcher would be responsible for sharing current trends in educational research as it relates to teacher induction. The researcher could also contact other district induction program leaders to inquire and share ideas of similar interest.

This study provides data that suggest the current model of induction, which focuses heavily on providing mentoring, does not have an impact on new teachers' sense of teacher selfefficacy. Future research and continued exploration to determine the effectiveness of its mentor component could assist district leaders in designing an effective method of selecting, preparing, assigning, and compensating their mentors. Developing a program that considers professional skills, personal skills, instructional skills, educational background and experience, and commitment to mentoring as part of its mentoring component should become a priority focus because of this study. Effective mentors possess skills and abilities beyond those of being an effective classroom teacher. The assumption cannot be made that experienced or effective teachers are proficient in the skills needed for mentoring and supporting new teachers (Ganser, 1996b; Goldrick et al., 2012). Providing effective mentors would also better assist in the pairing of mentors to mentees.

While a mentoring program can provide training and a mandatory schedule of activities, other elements of induction should be considered in improving this induction program's

effectiveness. Mandating release time for new teachers and common planning with mentors and mentees is necessary to increase the relationship between perceptions of mentoring and self-efficacy. This would require more administrative involvement. Providing administrators with a plan of action that supports this type of mentoring program would make mentoring or teacher support more of a priority in individual school buildings. If this induction program does not address its mentors' impact on new teachers' sense of teacher self-efficacy it will continue to exemplify the sink or swim mentality that has pervaded the teaching profession for far too long. This is a phenomenon in education that can be avoided through a revamping of the current model of orientation/mentor only induction with the implementation of a quality induction program that includes all or most the components detailed by this researcher.

Limitations

- 1. Access
 - a. There was a three-month waiting period to receive the list of new teachers from the time I submitted the permission to conduct research packet to the time I received permission to conduct research.
 - b. The selection of participants in the study was limited to beginning, new-to-district teachers in one school district in southeast Georgia.
 - c. The study included input from teachers who had been involved in the induction program in the chosen district at any time during the program's 3-year history and were still retained by the school district for the 2015–2016 school year.
 - d. Teachers who had been involved in the teacher induction program in the chosen district at any time throughout the program's 3-year history and were not retained by the school district for the 2015–2016 school year did not participate in the study.

- e. While the roster of names given to the researcher was extensive and included the names of all new teachers hired in the chosen district in the previous 3 years, many teachers had not participated in the induction program.
- 2. Longitudinal effects

Due to time constraints, the researcher chose a methodology and research problem that did not require an excessive amount of time to complete.

3. Self-reported Data

When conducting a survey, the researcher relies on the accuracy of self-reported data. Because it relies on the lived experiences of the participant, the data have the potential to be influenced by several biases, including attribution, telescoping or exaggeration. While the data collected are accepted without skepticism or criticism, it must be noted that this limitation does exist.

- 4. Measure Used to Collect Data
 - a. The researcher narrowed the focus of the questionnaire to include only the variables that I wanted to research.
 - b. The assumptions derived from the survey questionnaire were limited by the specific questions that were addressed in the format.

Recommendations for Future Research

The results of this study suggest several directions for future research in determining the relationship among participation in a mentor-based induction program, teacher sense of efficacy, perceptions of mentoring, and commitment to teaching. Research related to teacher efficacy suggests that teachers who are newer to the profession often have a lower sense of efficacy (Gibson & Dembo, 1984). Teachers receive efficacy information from students, parents, administrators, and colleagues as they perform their teaching activities. New teachers often have

less confidence in the classroom. No significant relationships were found between the teachers' perceptions of their mentors, their commitment to teaching, and their perceptions of their efficacy in student engagement, instructional strategies, and classroom management. Efficacy in instructional strategies was perceived the highest and rated highest when said to have been impacted by a mentor. With this information, further research could possibly indicate the nature of this high rating. Assumptions can be made that mentors provided intense assistance with instructional strategies but not the other elements in question.

Additional research should be conducted to determine the true effectiveness of the program by determining the experiences of mentee teachers. Understanding how novice teachers describe their mentoring experience is necessary in asserting that their mentors helped them professionally by enhancing their teaching strategies and classroom management, meeting immediate needs, or fostering reflection and growth.

Based on the results of this study, an assumption was made that the mentors of this chosen induction program were not effectively forming relationships with, teaching, guiding, or developing the novice teachers assigned to them. These mentors appeared not to have had a positive effect on their mentees' transition into the teaching profession. Therefore, a study of this assumption that investigates the experiences of novice teachers and their mentors should be conducted. Understanding the relationship between the mentor and mentee from each of their perspectives, could allow for a deeper analysis of the mentor-mentee dynamic; thus, allowing for a better system of matching mentors to mentees.

A subtest of this study suggests no statistically significant relationship between beginning teachers' efficacy in classroom management and their commitment to teaching (Appendix H). Further study should be conducted that specifically examines the relationship between classroom management and commitment to teaching. Understanding if teachers are leaving an organization or the profession due to the lack of efficacy in classroom management would give district level leaders the opportunity to put into action professional learning and other resources that could possibly increase teacher retention. With the current assumption that a mentor can have either strong positive or negative impact on a novice teacher, it is crucial to understand the mentormentee relationship on long-term commitment to the profession. Are teachers who have successful induction experiences more likely to commit to teaching long-term?

This study was designed to determine how new teachers perceive their mentors' role in their induction process and how their mentors affected specific facets of their teaching development. Based on the results of this study, it can be concluded that the induction program in this study has components that were not effective or impactful to new teachers' sense of teacher self-efficacy. The induction program's mentors appeared to be failing to have a positive effect on their mentees' transition into the teaching profession. By highlighting these perceptions, district administrators and program developers should learn more about how to respond to the unique needs of novice teachers. This researcher hopes that the findings from this study will help program leaders, administrators, and policymakers make informed decisions as they design, revamp, and enact policies related to new teacher induction, especially the mentoring component of induction.

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APPENDICES

APPENDIX A: STATE POLICIES SURROUNDING INDUCTION PROGRAMS

According to the New Teacher Center's (2012) review of state policies on teacher induction, at least 29 states have a clear definition of who is eligible to serve as a mentor, and 45 states address mentor selection broadly in their policies. Thirty-one states require mentor training while only 15 of those states require mentor professional development. Most states use teaching experience, communication and interpersonal skills, and teaching excellence as factors to determine mentor qualifications. Many states require a minimum of 3 to 5 years of classroom teaching experience as a prerequisite. Louisiana is the only state that requires 10 years of instate teaching experience to serve as a mentor teacher (New Teacher Center, 2012).

Several states have a specific definition of teaching effectiveness or excellence in their policies as criteria for mentor selection. Arkansas prospective mentors must show evidence of ongoing professional growth. Delaware mentors must have satisfactory teaching evaluations. Montana recommends its mentors have a proven record of positive effect on student achievement. The state of Washington requires its mentors be superior teachers based on their evaluations. Eight states (Alabama, Arkansas, Connecticut, Illinois, Maine, Maryland, Michigan, and Mississippi) allow retired teachers to serve as mentors. According to their polices, two states, Georgia and Montana, require a special certification for mentors. South Carolina mentors are evaluated on a set of 12 specific skills and abilities, including knowledge of beginning-teacher professional development and effective adult learning strategies, familiarity with the states' performance assessment system, and the willingness to engage in non-evaluative assessment processes including reflective conversations with new teachers.

Mentor training content and delivery are not specified in the policies of the 31 states that require mentor training. California, Illinois, Iowa, Maryland, Massachusetts, New Jersey, New Mexico, New York, Rhode Island, Vermont, Virginia, and Wisconsin articulate specific training elements such as knowledge of state teaching standards, formative assessment of new teacher performance, classroom observation, reflective conversation, and adult learning theory. Many of the states requiring training entrust responsibility for training mentors to local programs while others offer mentor training or recommend the use of reputable mentor training providers. Only 15 states require both mentor training and on-going professional learning after initial training. The New Teacher Center (2012) suggested that some type of support be required by state policies to deepen and develop mentor knowledge.

Twenty-two states specify mentor assignment requirements and provide a timeline for the assignment of mentors to beginning teachers. California requires each induction program to assign each beginning teacher a mentor within the first 30 days of initial teacher participation in the induction program. New Jersey requires that each inductee be assigned a mentor at the beginning of the contracted teaching assignment. North Carolina requires mentors to contact beginning teachers before the start of school or at the time of hire if later in the year. South Carolina's policy states that districts must assign a mentor before the teacher starts teaching or no more than 2 weeks after their start date for late hires. Arkansas requires that mentors be assigned to new teachers by three categories: same building, same grade, and same subject area.

Hawaii, Maryland, and Washington state policies currently allow for full-time mentors. Alaska's Statewide Mentor Project uses its full-time mentors to visit new teachers in person monthly and requires them to communicate weekly via Skype, email, or phone. Connecticut, Iowa, Massachusetts, North Carolina, and Virginia policies require periodic release time for observations and other induction-related activities. Ten states (Alabama, Arkansas, Connecticut, Delaware, Illinois, Kansas, Kentucky, Mississippi, North Dakota, and South Carolina) prohibit full-time mentors but restrict the number of new teachers with which mentors are allowed to work. Alabama, Arkansas, Illinois, and North Dakota do not allow mentors to support more than one new teacher. Connecticut limits its mentors' caseloads to two or three new teachers. Kansas, Kentucky, Mississippi, and South Carolina limit mentors to supporting two new teachers, and Delaware to three new teachers.

The NTC (2012) listed several recommendations for state induction policies: establish explicit mentor selection criteria; provide or require foundational mentoring training and ongoing mentor professional development; ensure that receive training and professional development in classroom observations; require programs to ensure mentor assignments occur in a timely manner; require programs to provide regular release time for mentors to meet with and observe new teachers during the school day; and allow for flexibility in mentor caseloads depending on the workload on the mentor.

Rate the value of each activity provided to you by your mentor this year. Excellent Good Fair Poor NA (Did not discuss) Professional knowledge Instructional planning Instructional strategies Differentiated instruction Assessment strategies Assessment uses Positive learning environment Academically challenging environment Professionalism Communication Will you continue to teach in the 2015–2016 school year? Yes No Do not know Do you plan to stay in education beyond the next 5 years? Yes No Do not know To what degree are your responses to the previous two questions related to the mentor support you received this year?

APPENDIX B: SURVEY

This section of the survey can be found at: http://u.osu.edu/hoy.17/files/2014/09/TSES++-scoring-zted8m.pdf

A little

Not at all

A lot

Somewhat

What is your age?	How many years of teaching experience do you have? Count this year as 1 year.
What is your gender? Female Male	
Which race/ethnicity best describes you? Black/African American Hispanic American White/Caucasian Other	What is your certification pathway? Traditional Teacher for America The New Teacher Project Georgia TAPP Other (please specify)
Bachelor's – education Bachelor's – other Master's – education Master's – other Specialist (Ed.S.) Doctorate	At what level do you teach? PreK – Elementary Middle High

APPENDIX C: PERMISSIONS TO USE INSTRUMENTS



ANITA WOOLFOLK HOY, PH.D.

PROFESSOR PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy the scoring instructions can be found at:

http://u.osu.edu/hoy.17/research/instruments/

Best wishes in your work,



College of Education 29 West Woodruff Avenue Columbus, Ohio 43210-1177

WWW.COE.OHIO-STATE.EDU/AHOY


Mareike Kunter 11/20/2013 Davis, James Kenny 😵

Inbox

You forwarded this message on 11/20/2013 11:48 AM

Dear James,

Thank you for your positive feedback on the article. The ten items published in this paper are the ones that worked best after several scale analyses. We have used this scale in several others studies in the meantime and they seem to form a sufficiently reliable and valid scale. Thus, I recommend you use just these items as they were published, as adding additional items will not really improve the scale. You can use the scales in your research as they are published, as long as they are correctly cited (with the 2011 paper).

Good luck in your research,

Mareike Kunter

Prof. Dr. Mareike Kunter Goethe-University Frankfurt Institute for Psychology Department Educational Psychology PEG Grüneburgplatz 1 S Reply all ↓ ∨

APPENDIX D: IRB APPROVAL FROM LIBERTY UNIVERSITY

LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

September 16, 2015

James K. Davis

IRB Exemption 2245.091615: The Effect of Mentor-Based Induction on New Teachers' Self-Efficacy, Commitment to Teaching, and Perceptions of Mentors

Dear James,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely.

G. Michele Baker, MA, CIP Administrative Chair of Institutional Research The Graduate School

LIBERTY UNIVERSTY.

1971 UNIVERSITY BEVEL EVEL EVEL ENERGY VA 24515 IRBOLIBERTY EDU FAX (434) 522-0506 WWW.LIBERTY.FON

APPENDIX E: APPROVAL TO CONDUCT STUDY FROM DISTRICT



Executive Director of Student Services

Superintendent of Schools

Coordinator of Assessments & Research

March 10, 2016

Dear James Davis:

I am pleased to inform you that your request for research titled "The Impact of Mentor Based New Teacher Induction: Beginning Teachers Evaluate Their Induction and Mentor Experience" has been approved with certain stipulations outlined below. This authorization simply means that you are able to conduct your research as described in your application.

Stipulations of this approval include:

- It is acceptable for you to send your parental survey home as long as:
 - $\phi_{\rm e}$. It is sealed for the parent/guardian to receive; and
 - You provide a return covelope so that the survey can be sealed as the student returns it.
- For purposes of this specific research, please make certain that you clearly identify yourself in your capacity as a researcher rather than as an agent of the second secon
- Further, you will need to work closely with the building-level supervisors to ensure that:
 - Instructional time is not being negatively impacted; and,
 - School personnel are not being subjected to undo burdens as a result of this research being conducted.

Please note that the **Second** follows these general procedural guidelines:

- Research that is approved by the Department of Student Services does not guarantee that schools, departments, school personnel, parents, students, community leaders, others, etc. will participate. Participation is strictly voluntary and should be neither expected nor anticipated. Each entity will need to agree to participate, and they have every right to decline to do so without consequence;
- No research involving students will be approved without the express written consent of Parent/Guardian. In other words, Parent/Guardian must "opt-in"- in writing prior to being included in any outside research;
- 3. No research will be approved that interferes with instructional time;

- 4. The district will assume no responsibility for accepting, disseminating, collecting, warehousing, and/or forwarding of any materials for researcher;
- All costs associated with approved research are the sole responsibility of 5.
- the researcher;No sequipment or resources are to be used to facilitate your research. These include (but are not limited to):
 - a. Email;
 - b. Fax Machines;

 - c. Copiers; d. Phones/Long Distance; e. L General Office Supplies;
 - Postage;
 - g. Stationary/Letterhead.
- 7. A copy of the approved research proposal and completed research is kept on file at the Department of Student Services for review;
- 8. Once research proposals are approved, any modifications to the approved methods, research instruments, populations, score, etc. are to be immediately brought to the attention of the Department of Student Services prior to continuing with said research;
- 9. Parents and staff members shall have the right to inspect such studies, and materials used in connection with such studies, on request;
- 10. Any data collection, reporting, and/or related research activity undertaken within, or by the County School System shall protect the privacy of students, parents, and employees;
- 11. Researchers are required to submit electronic copies of their competed research to the Department of Student Services upon successful completion of their defenses;
- 12. The treserves the right to revoke Research Approval at anytime. For your information, the Student Services Office is maintaining a copy of your approved research application which is available for review by personnel.

I wish you much success with your research!

Yours most truly.



Coordinator of Assessments and Research County School System

APPENDIX F: EMAIL INVITATION TO PARTICIPANTS

TOUL EXDELLE	ences as a participant in	County's Induction
Program		
Davis, James		
Mon 11/30/2015 4:53 P	M	
To: Davis, James		
Dear Colleague,		
As a doctoral candidat induction program as	e in education at Liberty University, I am conducting it relates to new teachers' perceived self-efficacy, corr	research to determine the effects of a mentor-based nmitment to teaching, and perception of their mento
As someone who parti encourage you to prov	icipated or is participating in the mentor-based induc vide input about the program. Will you take approxim	tion program as a new teacher in County , mately 10 minutes to respond to an online survey?
Clicking on the link be and use the link to retu	low will take you to the questionnaire. If you are unai urn to it later. Your responses will be saved for you.	ble to complete the questionnaire in one sitting, exit
Your responses will be the right to decline or have questions about 1	anonymous. Your participation is voluntary and is in discontinue participation at any point in the process of the study, you may contact me at	no way related to your employment status. You hav without penalty, prejudice, or consequence. If you
Click here for survey -		
	for your participation!	
Thank you in advance I		
Thank you in advance Sincerely,		
Thank you in advance i Sincerely, James K. Davis, Ed.S.		
Thank you in advance i Sincerely, James K. Davis, Ed.S. 5th Grade Teacher		
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APPENDIX G: CONSENT FORM AND APPROVAL TO USE

Thank you for agreeing to participate in the following survey. This informed consent outlines the facts, implications, and consequences of the research study. Upon reading, understanding, and signing this documentation, you are giving consent to participant in the research study.

Voluntary Nature of the Study

Your participation in this study is strictly voluntary. Your decision whether or not to participate will not affect your current or future relations with the researcher or the participating schools. If you initially decide to participate, you are still free to withdraw later without affecting those relationships.

Risks and Benefits of Being in the Study

No study is without risk. The risks are minimal, no more than the participant would encounter in everyday life. There are no risks associated with participating in this study and there are no short- or long-term benefits. In the event you experience stress or anxiety during your participation in the study, you may terminate your participation at any time. You may refuse to answer any questions you consider invasive or stressful.

Confidentiality

The records of this study will be kept private and all subjects will remain confidential. I will take every precaution to protect participant identity by not linking survey information to participant identity. In any part of this study is published, the researcher will not include any information that will make it possible to identify schools and participants. The survey will be located on SurveyMonkey.com. Data stored by Survey Monkey is in a secure location protected by pass card and biometric recognition; it is conceivable that engineering staff at the web hosting company may need to access the database for maintenance reasons. The researcher will also store all research documentation on a protected computer database on his personal computer used for educational and university purposes that requires a secure password to access.

Contacts and Questions

I understand that should I have any questions about this research and its conduct, I should contact any of the following:

The researcher conducting this study is James K. Davis at jkdavis7@liberty.edu. You may ask any questions you have any via email. If you have additional questions later regarding the form and content of study, you are encouraged to contact the researcher's faculty advisor **at an encourage** at **a state of the study**. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher and advisor, you are encouraged to contact the Institutional Review Board, [name of chair of IRB], Chair, [address], or email at [email address]

Electronic Signature

By clicking on the submit button to begin the survey, I am indicating that I have read the information provided and give my consent to be a participant in the research. I understand that when I complete the electronic survey, I am indicating that I have agreed to participate in this research project.

The Liberty University Institutional Review Board has approved this document for use from 9/16/15 to --Protocol # 2245.091615

CONSENT FORM

The Effect of Mentor-Based Induction on New Teachers' Self-Efficacy, Commitment to Teaching, and Perceptions of Mentors James K. Davis Liberty University

School of Education

You are invited to be in a research study to determine the effects of a mentor-based induction program as it relates to new teachers' perceived self-efficacy, commitment to teaching, and perception of their mentor. You were selected as a possible participant because you were a new teacher in the perceived county, Georgia, school district during the 2012-2013, 2013-2014, or 2014-2015 school years. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

James K. Davis, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information:

The purpose of this study is to determine the effects of a mentor-based induction program as it relates to new teachers' perceived self-efficacy, commitment to teaching, and perception of their mentor.

Procedures:

If you agree to be in this study, I will ask you to respond to an online questionnaire that should take no more than 15 minutes to complete. Your responses to the questionnaire will be anonymous.

Risks and Benefits of being in the Study:

The risks involved in this study are minimal, which are no more than a participant would encounter in everyday life. There are no direct benefits to participation. A long-term benefit of this study is that it has the potential to validate the opinions and perceptions of new teachers involved in the induction program thus benefiting new teachers who participate in teacher induction programs in the future.

Compensation:

You will receive no compensation for taking part in this study.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a participant. Research records will be stored securely and only I will have access to the records. Data will be destroyed 3 years after the dissertation is completed.

The Liberty University Institutional Review Board has approved this document for use from 9/16/15 to --Protocol # 2245.091615

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or the **County** County. Georgia, school district. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is James K. Davis. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at the state of the state of

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu

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

Statement of Consent

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To take the survey, click the "Click here to take survey" button.



APPENDIX H: NEW TEACHER SURVEY SECTION 2

Section 2 of the survey to new teachers contains items pertaining to teachers' sense of efficacy, measured by 24 items of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). The items are divided into three scales that determine the efficacy of student engagement, efficacy in instructional practice, and efficacy in classroom management. Respondents answer each question using a 9-point Likert scale ranging from 1 (*none at all*) to 9 (*a great deal*). A total score and the three scale scores are computed by finding the mean of the responses across all items (total score) and the mean of the responses in each scale (Table 2). A high score indicates higher perceptions of efficacy. Permission to use this survey was granted to the public via the College of William and Mary's public webpage (Appendix C).

Table 6

Scale	Items in scale	Cronbach's reliability*
Efficacy in student engagement	1, 2, 4, 6, 9, 12, 14, 22	.87
Efficacy in instructional strategies	7, 10, 11, 17, 18, 20, 23, 24	.91
Efficacy in classroom management	3, 5, 8, 13, 15, 16, 19, 21	.90
Total	1–24	.94

Items and Reliability of the Teachers' Sense of Efficacy Scales

Source. Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783–805.