

**EXPLORING INDUCTION: AN EXAMINATION OF NEW-TEACHER  
PERCEPTIONS REGARDING THE CONTRIBUTIONS OF THE INDUCTION  
PROGRAM TO SELF-EFFICACY IN A SUBURBAN SCHOOL DISTRICT IN  
SOUTHEASTERN PENNSYLVANIA**

by

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the requirements for the degree of

Doctor of Education

Field of Educational Leadership and Management

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## Abstract

### EXPLORING INDUCTION: AN EXAMINATION OF NEW-TEACHER PERCEPTIONS REGARDING THE CONTRIBUTIONS OF THE INDUCTION PROGRAM TO SELF-EFFICACY IN A SUBURBAN SCHOOL DISTRICT IN SOUTHEASTERN PENNSYLVANIA

Catherine L. Renzulli

Drexel University, November, 2016

Chairperson: Kenneth Mawritz, Ph.D.

While much is known about the reasons for a percentage of new teachers leaving the profession within a five-year period, less is known about the reasons for which they stay. Job-related reasons such as student discipline, poor salaries, stress, and insufficient administrative support are most frequently cited by new teachers who are termed “leavers” or “movers.” Rarely do these teachers mention the fact that they do not feel competent enough to continue in a teaching position. Often used interchangeably, competence and self-efficacy address the ability, and the belief that one has the capacity to do something successfully. Induction is the bridge that has the potential to foster self-efficacy, resulting in the retention of quality teachers. This mixed methods study examined new-teacher perceptions of the contributions that the induction program made to the levels of self-efficacy in the newly hired staff. With the use of the Teacher Sense of Efficacy Scale (TSES) administered to all new teachers having been hired in the past five years, and personal interviews with a random sampling from each induction year, this study found that the greatest influences of the induction program on teachers’ beliefs about their effectiveness in the classroom setting with regard to student engagement, instructional practices, and classroom management were mentorship, collaboration, and administrative support.

**The Dissertation Committee for Drexel University**

**Certifies that this is the approved version of the following dissertation:**

**EXPLORING INDUCTION: AN EXAMINATION OF NEW-TEACHER  
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PROGRAM TO SELF-EFFICACY IN A SUBURBAN SCHOOL DISTRICT IN  
SOUTHEASTERN PENNSYLVANIA**

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## Dedication Page

This study is dedicated to the loves of my life, my life's greatest gifts. Without the support, encouragement, and inspiration of my husband Ron, and our sons George Alexander and Michael, this doctoral work would not have been possible. Their belief in my efforts never waned, even when we had pizza more often than we should have.

My sisters, Marianne Cobaugh and Judy Altomare, also share in this dedication, as they supported me and our extended family with more than their share of holiday dinners, stress-relieving phone conversations, and pep talks. I trust that our parents are celestially celebrating the fact that I went off on another academic quest and the family emerged unscathed.

This study is also dedicated to the hopefuls who enter the teaching profession with passion in one hand and an unrehearsed playbook in the other. It is my hope that their colleagues welcome, support, and mentor these new teachers in this noble profession.

## Acknowledgment Page

I wish to acknowledge several people who have journeyed with me on my path to a doctoral degree. First and foremost, Dr. Kenneth Mawritz regularly inspired me to “step up onto the balcony” and shift the perspective of my study in order to clarify and crystalize my purpose, methods, and findings. His guidance, encouragement, and wisdom put me on a clear path to my doctoral defense, while still helping me to balance life’s little interferences.

Second, Dr. Alan Fegley has given me leadership opportunities not often afforded to a former education association president, and I appreciate his faith in my abilities. On behalf of the district, he has sought to learn more about the retention and professional development of new teachers and I hope to return to the district valuable information and actionable recommendations.

Third, Dr. Maryann Cox, a longtime friend, mentor, and committee member has influenced my professional practice with her wisdom and ethics long before my foray into administration and the doctoral program. Her commitment to the induction program is an inspiring promise of the support and professional development so vital for incoming new teachers.

Finally, I must recognize the power and presence of my colleagues in the Blue Bell cohort. Brought together by Design, we are a diverse, yet closely knit, group of professionals who work together, laugh together, and sometimes cry together, as we navigate the quick waters of Drexel University’s doctoral program. I am honored to be a Blue Bell cohort member affecting great change as only Drexel University would have us do.

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## **Chapter 1: Introduction to the Research**

### **Introduction to the Problem**

As the face of public education and its reforms evolve over the next decade, many are asking, “Who will teach our children?” For now, it appears that it will likely be a female new to the profession, or someone approaching retirement. Following the trends developing within the teaching force, researchers have found that the profession has ballooned in size, is drawing more females, is replacing retirees with recent college graduates, and the “graying” trend of near-retirees is coming to an end. More diversity will be found among new hires and a less stable work force (R. Ingersoll, Merrill, & Stuckey, 2014). With this in mind, many should be asking, “Who will remain in teaching long enough to hone their craft and in turn, impact student achievement?”

The changes in the elementary and secondary school work force have increased over the past decade with growth in the ranks of teaching staff exceeding the growth of student enrollment. The largest occupation group in the United States today, K-12 teachers reached its pinnacle prior to the economic downturn in 2008. Smaller class sizes, decreased teacher caseload and reduced number of classes taught per day account for some of the ballooning of the profession (R. Ingersoll et al., 2014). The hiring practice of selecting new college graduates to replace retiring educators is not the only contributing factor to the “greening” of the profession. In other words, teacher retention would be a non-issue if new college graduates simply replaced retiring educators. Recent results from the 2012-13 Teacher Follow-up Survey administered by the National Center for

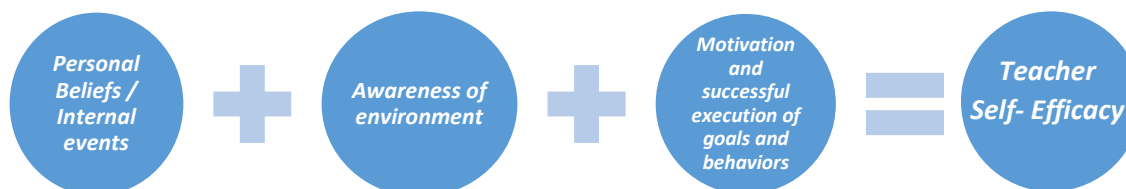
Education Statistics show that 80% of teachers with one to three years of experience remain in the school for which they were hired. The remainder are “movers” at 13% and “leavers” at 7% (Goldring, Taie, & Riddles, 2014, p. 3).

While the known reasons for individuals leaving the profession include poor salary, student discipline, poor administrative support, and poor student motivation (Hughes, 2012; R. M. Ingersoll, 2012), public school districts are in a position of determining the most effective ways of retaining quality teachers. Current research approaches this problem from two perspectives. The first is to “explain teacher turnover as a function of the characteristics of individual teachers,” (R. M. Ingersoll, 2001, p. 4) and the second perspective is to examine organizational impact on teacher retention, turnover, and mobility (R. M. Ingersoll, 2001; Kukla-Acevedo, 2009). In both cases, teacher retention and mobility have an effect on student achievement (Darling-Hammond, 2006; Strong, 2009).

Studying teacher retention through the lens of teacher characteristics presents a challenge since conflicting evidence exists whether or not the attributes of an effective teacher can be clearly defined. Attitudes, dispositions, values, and beliefs are often articulated as descriptors of effective teachers (Duta, Tomoaica, & Panisoara, 2015; Steele, 2010; Witcher et al., 2008), but their intangible nature lacks the measurability that teachers’ proficiencies in content knowledge and skill possess. Teacher self-efficacy however, is an intangible characteristic that is regularly referenced and assessed by researchers. Some would suggest that while self-efficacy is regularly addressed by researchers, low self-efficacy, or the feeling of being unable to perform a job competently, is rarely cited as a reason to leave the profession (Strong, 2009). The

assumption is that high self-efficacy in and among individual teachers translates to highly effective teachers and school communities (Bandura & Schunk, 1981; Erdem & Demirel, 2007; Woolfolk & Hoy, 1990).

Albert Bandura's Social Cognitive Theory provides a framework for examining self-efficacy as it refers to beliefs about one's capabilities that motivate individuals in particular ways and circumstances (*Bandura's self-efficacy theory* 2006; Gredler, 2009; Tschannen-Moran & Hoy, 2001). Bandura's early work entailed analyses of learning through imitative behavior, which grew into the attainment of pro-social (and conversely anti-social) behavior. He posits that a learner perceives the modeled behavior of others, along with the consequences of such behaviors, and is able to "code and store transitory experiences in symbolic form" (Gredler, 2009, p. 361). The learner uses these stored images and representations for future modifications of his or her own behavior. Differing from self-concept and outcome expectation, self-efficacy involves self-appraisal. This self-appraisal, the cognitive process of assessing personal beliefs about one's capabilities within a particular environment, helps an individual make decisions about performance in future and novel situations (Elliott, Isaacs, & Chugani, 2010; Erdem & Demirel, 2007; Gredler, 2009). Similarly, a teacher's self-efficacy can be described as, "a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Hoy, 2001, p. 783).

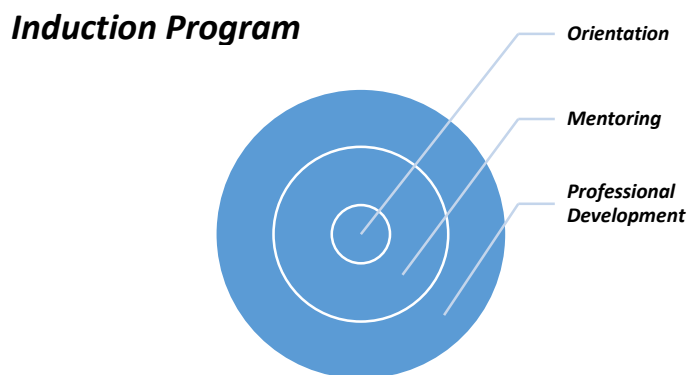


**Figure 1: Cognitive Processes of Teacher Self-Efficacy**

The induction process is an ideal starting point for an examination of the organizational impact of teacher retention, self-efficacy, turnover, and mobility. Induction takes a variety of forms with the intent of providing assistance and support to new teachers and ranges in length from one to three years. Additionally, an induction program varies in intensity depending upon policy, budget, and the needs of new teachers (Strong, 2009).

Beginning with an orientation to the school, district, or organization, induction can expand its services to include formal mentoring, common planning time, observation partnerships, reduced class size or case load, continuing professional development, and increased administrative support (R. M. Ingersoll, 2001; Strong, 2009). Regardless of the form it takes, induction bridges the immediate transition from pre-service student to in-service teacher. “While teacher education programs may aspire to fully prepare candidates during the pre-service phase, it is not until induction that beginning teachers have both the opportunity and ability to take on the key tasks of learning to teach.” (Allen, 2013, p. 75) It is an assumption that an effective induction program has the potential to improve both new-teacher retention rates and the quality of instruction, thus

positively impacting student achievement (Allen, 2013; Jensen, 2013; Perry & Hayes, 2011).



**Figure 2. Common Induction Program Components**

### **Statement of the Problem to Be Researched**

The retention of quality teachers is most critical in the nation's urban and rural communities, yet the need to acknowledge and support the complex work of teaching among all of the newest members of the profession is essential in improving student growth and learning (R. M. Ingersoll, 2012). Teachers leaving the profession frequently identify dissatisfaction with external factors such as inadequate salary, problematic student behavior, lack of autonomy, and heavy workload. Few identify personal struggles with competency or self-efficacy as cause for their leaving (Strong, 2009), yet significant research exists to suggest that low self-efficacy, a low expectation in one's ability to do something, contributes to teacher attrition (Feiman-Nemser et al., 1999; Tschannen-Moran & Johnson, 2011). Some researchers are attempting to pinpoint the reasons why teachers stay in the profession (Nieto, 2003; Waddell, 2010). Others identify induction practices as a vehicle for empowering new-teacher sense of self-efficacy (Kane & Francis, 2013; McNulty & Fox, 2010; Öztürk, 2014). This study seeks to examine new-



teacher perceptions of the induction program's contribution to their self-efficacy goals related to student engagement, instructional practices, and classroom management.

## **Purpose and Significance of the Problem**

### **Purpose Statement**

The purpose of this research study was to explore the influence of an induction program on new-teacher self-efficacy. While new teachers are often the traditional age of a college graduate, many newly-hired teachers enter teaching as a second profession or have left another teaching position. Regardless of age or situation, induction is intended to orient and support the newly hired employee. This investigation employed a mixed methods study surveying levels of self-efficacy of teachers with one to five years of experience in a public school district, followed by interviews eliciting the influential factors of the induction program.

### **Significance of the Problem**

By examining new-teacher self-efficacy and the contributing factors of the induction program, the study's results may provide to the district information on which induction components contribute to a teacher's self-efficacy in student engagement, instructional practices, and classroom management. As differentiated instruction has become best practice for classroom teachers (Danielson, 2007), it may benefit the district to differentiate its programming and professional development for new teachers. This study may also serve to corroborate or dispute the findings of the district's program evaluation. Observing new-teacher self-efficacy and the contributing characteristics of the induction program has the potential of guiding all staff, including veteran teachers and leadership, to an understanding of the specific needs of new teachers. Armed with

this information, the district can drive and differentiate professional development for all of its employees.

Overall, the results will articulate levels of teacher self-efficacy in three distinct areas: student engagement, instructional practices, and classroom management, capacities generally addressed in induction programs (Gujarati, 2012). Accompanying a survey on self-efficacy was an opportunity for the new teacher to rank the level of influence of induction activities on self-efficacy. Finally, follow-up interviews described and clarified the resulting impact of the discrete components of the district's induction program on teacher self-efficacy.

### **Research Questions**

The central question of this study is as follows:

How does the district induction program contribute to the self-efficacy of new teachers, years one through five?

Sub-questions:

1. How does the district induction program contribute to new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the Teacher Sense of Efficacy Scale?
2. How do new teachers describe their attainment of self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) from the district induction program?

## **The Conceptual Framework**

### **Researcher Stances and Experiential Base**

The researcher's position on this study is shaped by experience in the field of education. With over three decades in the field as a classroom teacher, a Teachers' Association president, and an administrator, the author has familiarity with the support required to foster new-teacher competence and confidence. In this pragmatic stance, "the focus is on the outcomes of the research – the actions, situations, and consequences of inquiry – rather than antecedent conditions"(Creswell, 2013, p. 28). This study seeks to examine the contributing factors of an organization's induction program on teacher self-efficacy rather than the intrinsic motivators that bring individuals to the profession itself. Acknowledgment of these certain dispositions in new teachers drawn to the teaching profession is both commonly accepted and espoused by the educational community.

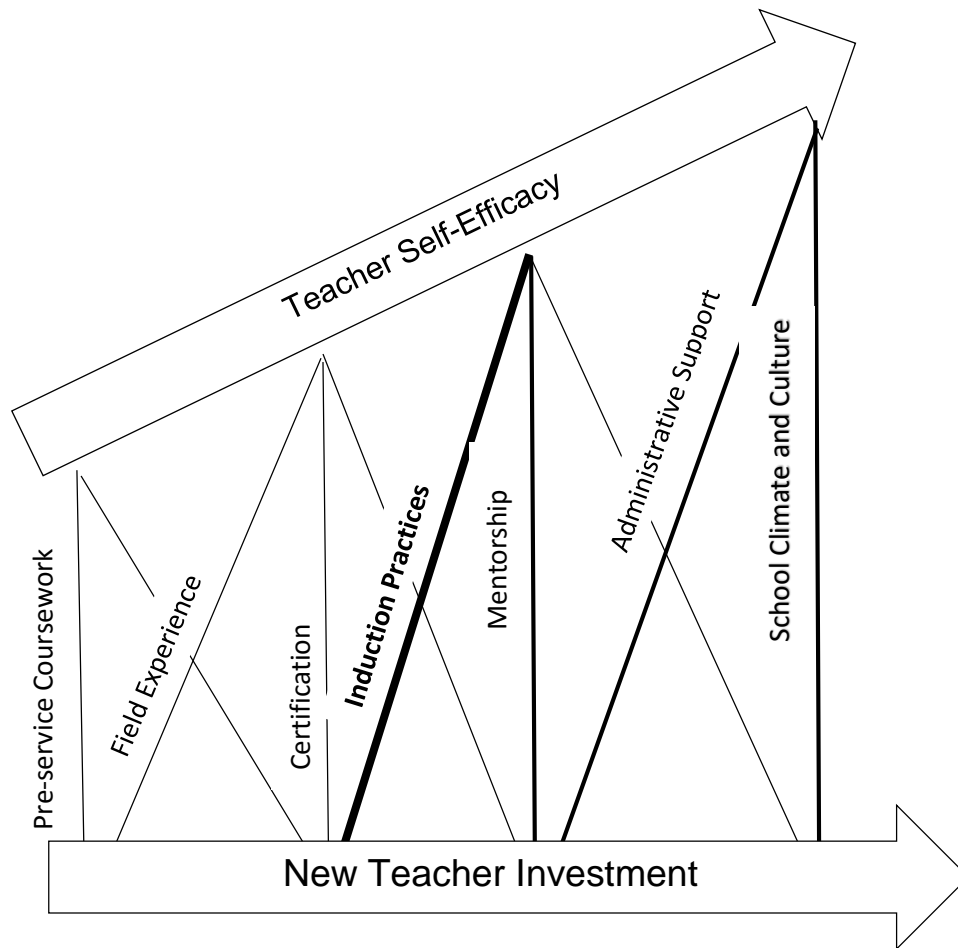
These dispositions, difficult to measure yet easily identified, include the altruistic desires of contributing to the welfare of society, mentoring youth, ensuring the principles of democracy through education, and securing prosperity and personal satisfaction for the next generation. Possession of these dispositions or temperaments, such as fairness, decency, service, pro-social behavior, honesty, humility, trust, empathy, and healing offer pre-service teachers the language to describe the attributes of exemplary teachers (Meidl & Baumann, 2015). While this study recognizes the inherent value of such dispositions, it attempted to learn what district-driven practices foster the values and beliefs that ultimately determine a teacher's sense of efficacy.

## **Conceptual Framework**

Research exists to support the position that an increase in new-teacher investment, such as an induction program, will yield an increase in teacher retention (Allen, 2013; R. M. Ingersoll, 2012). Can an assumption then be made regarding the increase in new teacher investment and a corresponding new-teacher self-efficacy?

Pre-service coursework, field experience, and consequent certification are acknowledged as prerequisites for employment and are not considered as an integral component of the current study. Varying in content and form, the vocational path to teaching differs, as does its required pre-service coursework (Cochran-Smith & Villegas, 2015). How and why the teacher was hired, and for what personal and professional qualities the teacher was hired, were also irrelevant to this study. Whether new to the profession or new to the organization, the newly-hired teacher and his or her full transition into a district practitioner was the emphasis of this particular study.

Aiding in this transition and specifically developed to provide orientation, support, and professional development, the induction program seeks to serve as a bridge between pre-service and in-service, between student-teacher and teacher of students, and between intern and practitioner. While mentorship, administrative support, and school climate and culture sustain the new teacher on a daily basis, induction practices are precisely directed at the professional growth and development of all new teachers. This study assumed that professional growth and development would result in increased self-efficacy. Such an assumption would drive the central question, “How does the district induction program contribute to the self-efficacy of new teachers, years one through five?”



**Figure 3. Conceptual Framework of the Study**

Three themes emerge from the literature on teacher self-efficacy and new-teacher induction as it pertains to teacher pre-service training, retention, and professional development. The first theme includes studies of self-efficacy, and its capacity to impact teacher retention and performance. The second theme comprises research on induction programs and the full gamut of services that they offer, including collegial mentorship. Finally, the literature speaks to the role of school climate and culture surrounding new teachers, a role large enough to warrant its own consideration as a separate entity from induction.

## Definition of Terms

**Teacher Self-Efficacy:** A teacher's belief or judgment of his or her own abilities to reach learning outcomes and student engagement for all students regardless of student motivation (Tschannen-Moran & Hoy, 2001). Specific to educational situations, a teacher perceives himself as competent in performing the tasks that will bring about learning outcomes and student engagement (*Bandura's self-efficacy theory* 2006).

**Induction:** A continuum of services to support and guide new teachers in the beginning stages of their careers or entrance into a new educational setting. It encompasses orientation to the organization and “different kinds of collaboration among beginning teachers and colleagues; and professional development activities designed to affect teaching and student achievement.” (Odell, Schwille, & Wang, 2008, p. 132).

**Mentorship:** The practice of an experienced teacher mentoring a novice teacher (Hellsten, Prytula, Ebanks, & Lai, 2009). “Mentoring is about creating an enduring and meaningful relationship with another person, with the focus on the quality of that relationship including such factors as mutual respect, willingness to learn from each other, or the use of interpersonal skills. Mentoring is distinguishable from other retention activities because of the emphasis on learning in general and mutual learning in particular” (Salinitri, 2005, p. 858).

**Pre-service teacher training:** General education courses and content courses that provide a pedagogical foundation for how people learn, how to communicate, how to use technology effectively, and how to reflect on and improve teaching practice (Darling-Hammond, 2006). A prerequisite for state issued certification, accredited pre-service

education and field work, including alternative pathways, is often driven by state policy (Darling-Hammond, 2006; Freeman, Simonsen, Briere, & MacSuga-Gage, 2014).

**School climate:** The shared values, attitudes, and social, emotional and physical well-being of an organization. School climate may include a collective mood or morale of a particular group (Gregory, Cornell, & Fan, 2012; Gruenert, 2008).

**School culture:** Encompassed by school climate (Van Houtte & Van Maele, 2011), school culture is the expression of shared values, beliefs, and expectations and will include rituals, symbolism, myths, and traditions that are passed on to new members of the organization (Jurasaitė-Harison & Rex, 2010; Tschannen-Moran & Tschannen-Moran, 2011; Van Houtte & Van Maele, 2011).

## **Assumptions and Limitations**

### **Assumptions**

In moving forward with a study of teacher self-efficacy and induction practices, the researcher assumed that well planned and executed induction programs would improve teacher retention through increased support and professional development. A further assumption was made that all subjects were properly certificated and had a current satisfactory teacher evaluation rating. It was also assumed that inductees would attend and participate in the induction activities as well as collaborate with an assigned mentor if available. It is understood that not all induction programs are alike and that some induction programs are identical for beginning and experienced teachers, both entering the system. In all cases, the researcher assumed that stakeholders, administration, and teachers were aware of the program's requirements and would participate accordingly. Finally, an assumption was made that increased self-efficacy would result in increased

teacher retention and that induction practices would contribute to new-teacher self-efficacy.

### **Limitations**

The researcher acknowledges limitations to the study that may hinder a broad generalization of its results (Roberts, 2010). Both the sample size and the demographics were taken into consideration when evaluating the results of the study. The sample size was relatively small due to the time constraints of the study itself. Approximately 102 participants were surveyed and this represented 31% of the staff. Of the 102 participants, nine volunteers engaged in follow-up interviews, representing an even smaller percentage of the staff and group of inductees.

Much of the research on teacher retention reflects the challenges of urban settings for beginning and new teachers (Hammerness & Matsko, 2013; Waddell, 2010). This study was conducted in a small public school district in the suburbs of Philadelphia, Pennsylvania. The factors of poverty, student discipline, class size, and other barriers to teacher efficacy caused by debilitating budget cuts were not addressed here.

The study took place at the conclusion of the 2015-16 school year, with the subjects having participated in the Induction Program between August 2011 and May 2016. Participants were invited to complete demographic information, a self-efficacy assessment, and a survey item that required the respondent to rank, in order of influence on their efficacy, the various practices of the induction program. Interviews with representatives from Years 1, 2, 3, 4 and 5 were conducted in order to elicit new-teacher perceptions of the discrete components of the induction program.



## Summary

In this particular setting, it is important to remember that induction programs, mandated by the state, vary in complexity and length of time for their full implementation. Considerable research is available on why teachers leave the profession, yet it is this researcher's intention to learn why they may stay. The study examined the contributing factors of the site's induction program that will potentially lead to higher teacher self-efficacy and ultimately lead to greater teacher retention.

The results addressed levels of teacher self-efficacy among the newest staff members with regard to student engagement, instructional practices, and classroom management. Referencing these results, follow up interviews were conducted to elicit further explanation of the volunteer's perceptions of the most effective components of the induction program on his or her own self-efficacy.

## **Chapter 2: The Literature Review**

### **Introduction to Chapter 2**

Retention of quality teachers continues to plague our nation's schools as reform efforts, student achievement, and teacher accountability wrestle with teacher attrition, teacher mobility, and teacher qualification. Teacher turnover, whether voluntary or involuntarily, negatively affects the school organization and ultimately student learning. It is noted that during the 2011-12 school year, 8% of public school teachers moved to another school, while another 8% left the profession altogether (Goldring et al., 2014), with attrition and mobility being greater among the teaching profession than any other (Hughes, 2012; R. M. Ingersoll, 2001). Given the costs of interviewing, hiring, and training, which taxes the organization itself, student achievement is impacted as well (Kukla-Acevedo, 2009; Waddell, 2010). The effect of inexperienced teachers with fewer skills and temperaments for teaching is significant, particularly in urban settings (McNulty & Fox, 2010; Waddell, 2010).

According to the Consortium for Policy Research in Education, the teaching force is larger than ever; and has gotten older with the once-increasing number of retirements having now leveled off. Simultaneously, the teaching force is younger, with approximately 45% of the work force with ten years or less experience (R. Ingersoll et al., 2014). What is required to retain this younger demographic is based on what researchers have found to be the stressors or causes of dissatisfaction: salary, student discipline problems, and administrators' actions (Hughes, 2012; R. M. Ingersoll, 2001; Kukla-Acevedo, 2009; Wynn, Patall, & Carboni, 2007). The outlook for student learning is grim however, if the only goal is to retain teachers.

Retaining and professionally developing teachers to overcome some of the previously mentioned stressors may very well invoke a resilience theory. “Resilience theory speaks to the strengths that people and systems demonstrate that enable them to rise above adversity.” (Van Breda, 2001, p. 1) Two important aspects of teacher resilience are the emphasis of strengths and the incidence of protective factors such as personal and familial supports, as well as social and organizational supports. Developing teacher resilience yields increased confidence, and with it, the belief that stressors are challenges rather than threats (Doney, 2013). Some would argue that self-efficacy is a characteristic of a resilient teacher (Tait, 2008).

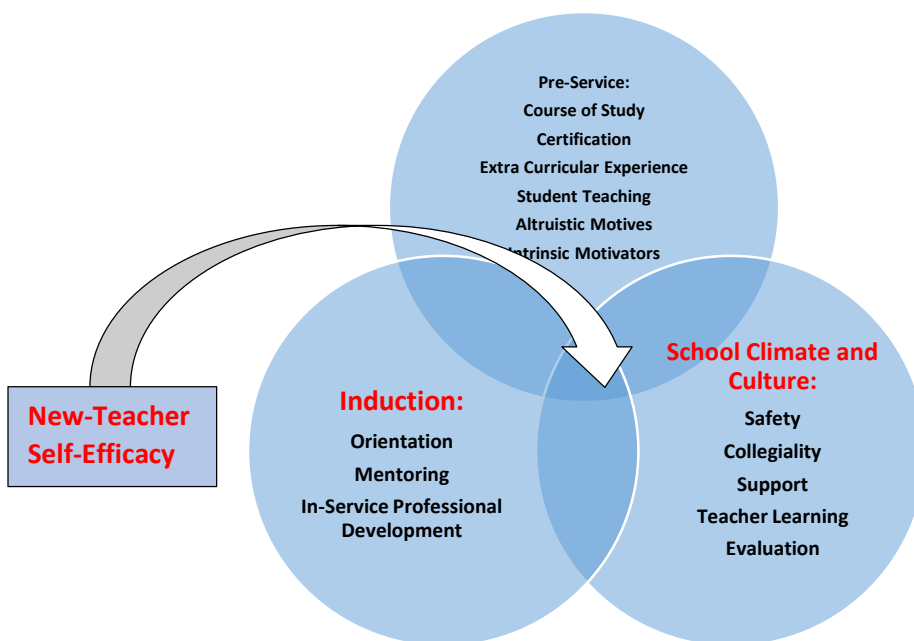
While substantial research addresses why teachers enter the profession, leave the profession, or move within the profession (Boe, Cook, & Sunderland, 2008; Borman & Dowling, 2008; R. M. Ingersoll, 2001), less is known about what helps teachers to stay in the profession. Sonia Nieto suggests that the attitudes and beliefs that brought teachers to the profession are disappearing (Nieto, 2009). The intrinsic desire for making a difference in the life of a child, coupled with a sense of commitment to social responsibility and lifelong learning, is often overridden by the pressure to prepare students for high stakes testing and a lock-step march through a core curriculum (Strong, 2009). Very little can be done to alter inherent motivations (Balli, 2014; Chesnut & Cullen, 2014) that describe this kind of altruism. It is equally difficult to reshape one’s desire for acquiring a two-month hiatus in the summer or the demand for a particular salary. The search for external practices that enhance a teacher’s belief that he or she is able to overcome the stressors of teaching, become resilient, and to ultimately grow professionally seems to be a worthy venture. One might hypothesize that if high turnover compromises student learning, then

stability achieved by retention and professional growth will promote student learning (McNulty & Fox, 2010; Perry & Hayes, 2011).

## Literature Review

### Conceptual Framework

This research study will explore the influence of an induction program on new-teacher self-efficacy. Three themes emerge from the literature, the first being the broadly researched stream, self-efficacy. The second stream addresses induction and includes research on orientation activities as well as the concept of mentorship. The third and final stream speaks to overall school climate, which includes school culture and administrative support. A visual of the three streams follows:



**Figure 4. Concept Map Showing the Potential Influences on Self-Efficacy**

**Table 1**  
**Key Resources for Literature Review**

	<b>Self - Efficacy</b>
Aloe, Amo & Shanahan (2014)	Classroom management self-efficacy
Balli, S. J. (2014)	Pre-service juxtaposed memories
Bandura (2006)	Constructing self-efficacy scales
Bandura (2002)	Social cognitive theory
Bandura (2003)	Negative Self-efficacy
Beltman, S., Glass, C., Dinham, J., Chalk, B., & Nguyen, B. (2015)	Pre-service teachers' professional identities
Berman, McLaughlin, Bass, Pauly & Zellman (1977)	Federal programs supporting educational change – factors affecting implementation and continuation
Cerit (2013)	Relationship between self-efficacy and implementing curriculum reform
Chesnut, S. R., & Cullen, T. A. (2014)	Effects of self-efficacy, emotional intelligence, and perceptions of future work environment on pre-service teacher commitment
Darling-Hammond, L. (2006)	21 <sup>st</sup> century teacher education
Doney (2013)	Fostering resilience
Erdem & Demirel (2007)	Teacher self-efficacy beliefs
Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014)	Pre-service teacher training programs: state accreditation policy
Jenkins, J. M. (2014)	Pre-service teachers' observations of experienced teachers
Nieto (2009)	Survival to thriving
Pellegrino, A. M. (2010)	Pre-service teachers and classroom authority
Reilly, Dhingra & Boduszek (2014)	Job satisfaction = self-efficacy beliefs + self-esteem + job stress
Rotter, J.B.	Learning theorist; locus of control
Tschannen-Moran, Hoy & Hoy (1998)	Teacher efficacy: meaning and measure
Vancouver(Vancouver, Thompson, & Williams, 2001)	Relationships among self-efficacy, personal goals and performance (conflicting research)
Wheatley (2002)	Doubts and uncertainty, keys to education reform (conflicting research)
	<b>Induction</b>
Bartlett & Johnson (2010)	Induction policy
Feiman-Nemser, Schwille, Carver & Yusko (1999)	Conceptual review of induction literature
Gujarati (2012)	Comprehensive induction system

Hallam, Chou, Hite & Hite (2012)	Comparison of district coaches and in-school mentors
Hammerness & Matsko (2012)	Case study: urban induction program
Ingersoll & Strong (2011)	Critical review: Induction and mentoring
Ingersoll (2012)	Data: teacher induction
Ingersoll (2012)	Impact of induction support
Jensen (2013)	Targeted professional development
Kane & Francis (2013)	Future for professional learning?
Kardos & Johnson (2008)	Mentoring: the good, bad and inequity
Nasser-Abu Alhija & Fresko (2009)	Socialization of new teachers
NEA Foundation (2002)	Using data to improve induction program
Ozturk, Mustafa (2013)	Teacher development models
Perry & Hayes (2011)	Induction program effects on excellence, mobility and retention rates
Shanks & Robson (2012)	Apprenticeship during induction year
Shockley, Watlington & Felsher (2013)	Efficacy of teacher induction in secondary schools
Strong, M. (2009)	Effective teacher
Wang, Odell & Schwille (2008)	Critical review of literature: teacher induction on teaching
Van Zandt (2013)	Induction on teacher development, retention and quality
	<b>School Climate and Culture</b>
Bradshaw, Waasdorp, Debnam & Johnson (2014)	Measuring school climate: focus on safety
Bulach, C. R. (2001)	School culture empowering its partners
Collie, Shapka & Perry (2011)	Predicting teacher commitment
Gregory, A., Cornell, D., & Fan, X. (2012)	Teacher safety and authoritative school climate
Gruenert, S. (2008)	School culture and climate: not the same thing
Jurasaitė-Harbison & Rex (2010)	School cultures and informal teacher learning
Thapa, Cohen, Guffey & Higgins-D'Alessandro (2013)	Review of school climate research
Tschannen-Moran & Tschannen-Moran (2011)	Strength-based focus improves school climate
Van Houtte & Van Maele (2011)	Conceptual clarity regarding school climate
Wynn, Carboni & Patall (2007)	Perceptions of mentoring, climate and leadership

### **Stream #1: Self-Efficacy**

*Self-efficacy: the core.* At the core of this study and within the context of educational research is new-teacher self-efficacy. While it is both intangible and self-reported, it has been linked to student achievement since the mid-seventies. The work of Julian Rotter and his social learning theory provided the backdrop of identifying teacher efficacy. From the early 1950's, Rotter developed arguments regarding the way behavior was changed through the use of reinforcements:

A reinforcement acts to strengthen an expectancy that a particular behavior or event will be followed by that reinforcement in the future. Once an expectancy for such a behavior reinforcement sequence is built up the failure of the reinforcement to occur will reduce or extinguish the expectancy. (Rotter, 1966, p. 63)

These behavioral outcomes are associated with acquiring both skills and knowledge and benefit both the teaching practice and learning of the classroom teacher.

Rotter's theory regarding locus of control with reinforcements (outcomes of behaviors) underpinned the RAND research that investigated whether teachers believed that they could, or could not, control the behavioral outcomes of their students and whether the teachers believed that the control came from within themselves or from environmental factors (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977; Rotter, 1966; Tschannen-Moran, Hoy, & Hoy, 1998). The desired outcomes of student performance and behaviors became the reinforcers for continued teaching behaviors and teacher efficacy became a term that would describe "the extent to which the teacher believes he or she has the capacity to affect student performance" (Berman et al., 1977, p. 137).

Simultaneously, Albert Bandura's social cognitive theory "identified teacher efficacy as a type of self-efficacy – a cognitive process in which people construct beliefs about their capacity to perform at a given level of attainment" (Tschannen-Moran et al., 1998, p. 203). Bandura's notion of self-efficacy, an anticipation of what one is able to do in the future, carries with it another expectation. Bandura asserts that a level of competence elicits certain expectations of particular outcomes. For example, a person with low self-efficacy about skate boarding will have the expectation of falling. Self-efficacy is not evaluative in nature and no level of competence is measured. Instead, it is self-perception of one's level of competence in a particular task and considered separate from self-esteem and self-worth (Cerit, 2013; Reilly, Dhingra, & Boduszek, 2014; Tschannen-Moran et al., 1998).

Further, social cognitive theory "is rooted in the belief that one has the power to produce desired effects; otherwise one has little incentive to act or persevere in the face of difficulties" (Bandura & Locke, 2003, p. 88). Efficacy beliefs not only contribute to levels of motivation and performance, but also have the capacity to change over time through guided contact, modeling, encouragement and anxiety reduction (Bandura & Locke, 2003; Multon, Brown, & Lent, 1991). While most meta-analyses support Bandura's theory of self-efficacy, conflicting research exists which claims that "belief in one's capabilities has no determinative function or is self-debilitating" (Vancouver et al., 2001, p. 618).

While Vancouver found the positive effects of self-efficacy and personal goal setting in between-person studies, they also found negative relationships for such in within-person studies (Vancouver et al., 2001). Bandura admits the negative effects of



self-efficacy when a significant miscalculation exists, either high or low, that causes an individual to fail or become discouraged (Multon et al., 1991).

Both Rotter and Bandura have paved the way for examining teacher-efficacy and self-efficacy, and subsequent researchers have used the theorists in search of correlations to, and relationships with, job stress, teacher effectiveness, student achievement, job satisfaction, and teacher retention. For the purposes of this study, new-teacher self-efficacy is viewed within the context of the classroom setting and a teacher's interactions with students.

*Self-efficacy and pre-service: preparing the core.* While teacher preparation and certification are not an integral component of this study, they cannot be ignored in discussions regarding new-teacher self-efficacy. "Licensure ends the traditional role of teacher education and transfers the responsibility for teachers' ongoing professional development to the employing district and school" (Allen, 2013, p. 75). Indeed, the terms "pre-service" and "in-service" may hint at the unrehearsed nature of the teaching profession. The research on the self-efficacy of pre-service teachers reflects the influence of academic preparation, exposure to classroom experience, and personal dispositions toward the profession.

While teacher preparation programs (TPP's) vary little in their training and most focus on course offerings, mentoring, and field experience (Koedel, Parsons, Podgursky, & Ehlert, 2015), two movements are afoot that address teacher training. The first and most prevalent model for TPP's is the traditional path toward the classroom by developing an understanding of content, pedagogy, and supervised practice in a four-year degree program with certification (Jenkins, 2014; Koedel et al., 2015). The second and

alternative method can be described as a recruitment effort directed toward degreed individuals who possess deep content knowledge, above average SAT scores, and the ability to enter the classroom after a six-week training period (Shuls & Ritter, 2013; Wilson, 2014). Although discussion continues on which route better serves student achievement, some believe that teachers are better prepared than ever before with their understanding of evidence-based classroom practices, their familiarity with teaching and learning processes, and their access to, and utilization of, data (Darling-Hammond, 2006; Sayeski, 2015).

In developing this professional identity, the teaching student is exposed to in-service field experiences, observations, and a practicum. Even though the amount of time in field experience varies from program to program, the objective of field experience is both observation and practice. Over time, teaching students methodically move from observing pedagogy, to observing both pedagogy and students, and finally observing pedagogy, students, and subject matter (Jenkins, 2014).

During the traditional student teaching period, the pre-service teacher is tasked with employing both the knowledge and skills from coursework as well as the cooperating teacher's techniques. Unless an effort has been made on the part of the cooperating teacher, with whom there has been limited exposure, and the pre-service teacher to consciously plan for the transfer of authority, the student teacher may default to emulating and imitating the cooperating teacher, or foregoing the assumption of authority by befriending the students (Morales, 1980; Pellegrino, 2010). In either case, developing one's own teaching and management style during a six to twelve-week student teaching assignment has its challenges. The challenges of this culminating

experience, placed at the end of a four-year post-secondary certification program, may leave the pre-service teacher frustrated by the lack of his or her own instructional style. It may also leave the mentor teacher concerned about the compromised focus and academic achievement of the students (Pellegrino, 2010). This student teaching context of a pre-service teacher's developing professional identity is only part of the experience that is brought to the profession.

A complementary piece of the pre-service teacher's developing professional identity is that of disposition. Teacher disposition is a significant contributing factor in forming a teacher's practice and the level of commitment (Chesnut & Cullen, 2014; Collie, Shapka, & Perry, 2011). Pre-service teachers' beliefs and notions about teaching are in place long before the teachers begin a teacher education program. As a result, they often face conflicted decisions on whether to instruct in accepted theories and research-based practices or to recreate memorable experiences from twelve years of schooling (Balli, 2014). As they reconcile memories and present dispositions with beliefs about their future selves (Bandura, 1977; Chesnut & Cullen, 2014), pre-service teachers need support in maintaining enthusiasm and providing opportunities to create a strong professional teacher identity (Beltman, Glass, Dinham, Chalk, & Nguyen, 2015).

*Self-efficacy and in-service: the core at work.* The self-efficacy theory suggests that teachers with an elevated sense of self-efficacy tend to exhibit higher levels of organization, goal setting, openness to innovation and experimentation, and are more committed to the practice of teaching. Furthermore, a high teacher self-efficacy enhances student autonomy and builds a student's sense of efficacy in both knowledge and skill (Cerit, 2013; Hoy & Spero, 2005). Of particular concern for novice teachers, however, is

the building of self-efficacy through the pre-service years, only to have it decline during student teaching. When there is a sudden, total immersion, sink-or-swim approach to teaching, it is likely to be damaging to building a sense of teaching competence (Erdem & Demirel, 2007).

In contrast, some researchers contradict the common assumption that high self-efficacy is essential in teacher development and education reform. Wheatley (2002) suggests that doubts and uncertainties have the potential to affect teachers in the following ways:

- They create instability. Transformative change and authentic learning happen only through uncertainty, through the discovery that what an individual thought he or she knew is not enough to do the job (Jones & Nimmo, 1999).
- They foster reflection.
- They create a feeling of guilt over perceived ineffectiveness and it may serve as a motivator for improvement.
- They provide a gateway to collaboration and set the groundwork for improvement in teaching.

Regarding doubts and uncertainties, he is careful to distinguish between the teacher who is plagued with doubt, from the teacher who uses doubt to wonder about or question his or her own teaching practice. The former state is disabling while the latter is mobilizing. Mobilization toward self-awareness also deters the effects of burn-out among overconfident teachers who assume the burden of single-handedly correcting all of society's ills. Doubt places a teacher in a position of learning how to reach struggling students rather than blaming them (Aloe, Amo, & Shanahan, 2014; Wheatley, 2002).

Finally, “progressive teaching methods naturally increase teacher uncertainty regarding their efficacy because teaching practices, such as innovative assessment, increase the unpredictability of the classroom.” (Ross, Bradley Cousins, & Gadalla, 1996, p. 388)

What can be underscored from the research is that it benefits both teachers and students for teachers to have a high sense of self-efficacy in organizing and executing courses of action (Bandura, 1977; Erdem & Demirel, 2007), while maintaining enough self-reflective doubt to hunger for more effective practice.

### **Stream #2: Induction**

New teacher induction is meant to serve as a transition of student from teaching to teacher of students (Fresko & Nasser-Abu Alhija, 2009). As an undergraduate learner, the new teacher has been grounded in professional knowledge and skill and is reminded as a practitioner, that the complexity of the classroom cannot be replicated in pre-service training (Kane & Francis, 2013; McNulty & Fox, 2010; Öztürk, 2014). Most induction programs are geared toward giving newcomers a local overview of the organization, but details vary as far as duration and intensity. Orientation, mentoring and opportunities for professional development are three commonalities in most programs (Kane & Francis, 2013).

*Orientation and transition.* Orientation, the first segment of a career-spanning professional development plan, is meant to acquaint the novice teacher with a local district’s vision, mission, policies, procedures and guidelines, an overview of curriculum, socialization, and instructional resources (Öztürk, 2014; Shockley, Watlington, & Felsher, 2013; Shanks & Robson, 2012; Jensen, 2013). It can certainly be overwhelming for the most vulnerable members of the organization (Allen, 2013). They are expected to

know, to perform, and to be evaluated at the same level, if not more frequently, than veteran teachers (Feiman-Nemser et al., 1999).

In addition to providing an entry into an organization, orientation is meant as a transitioning piece to the profession itself. Ingersoll (2012) notes that licensure ends the traditional role of teacher education. Ironically, the induction process is not the venue for novice teachers to implement innovation and strategies for educational reform. The homegrown induction programs often do little to ease new teachers into professional practice. Rather, new teachers are found struggling to assimilate into school culture and often into the academic traditions of the organization (Nasser-Abu Alhija & Fresko, 2010; Öztürk, 2014; Shanks & Robson, 2012). “Academics develop and refine theory while managers engage in practice. In short, there is a theory / practice divide, or gap” (English, 2002, p. 24). Constructing theory in pre-service that better reflects practice would close the gap (English, 2002; Shockley et al., 2013).

While orientation is initially beneficial, it is unclear what lasting effects it has. For those teachers arriving mid-year, for example, no opportunity exists to learn about the school context or the students (Kane & Francis, 2013). Program administrators need to diversify their induction programs (Öztürk, 2014; Shanks & Robson, 2012). Some researchers suggest that, “Working toward different goals and influencing beginning teachers’ learning and teaching requires different visions, dispositions, and skills” (Wang, Odell, & Schwille, 2008, p. 146). While consensus exists that induction is essential, little empirical evidence exists to suggest an effective format, nor is there empirical evidence to determine a program’s effectiveness. Some claim that strong induction programs are well documented, suggesting that the more induction components, the lower the attrition

(R. M. Ingersoll, 2012). However, most of the research conducted in this area is qualitative in nature, difficult to replicate quantitatively, and it is self-reported with no peer review (Kane & Francis, 2013).

***Mentorship.*** Much of the literature also reiterates the benefits of a mentor, usually a veteran teacher with strong content knowledge and sound pedagogical skill. While mentoring is central to most induction programs, no significant amount of evidence exists to suggest that the mentoring component impacts student learning (Jensen, 2013; Kane & Francis, 2013). In reality, mentorship is a cost-saving strategy, and when properly implemented, a supplement to both the orientation and professional development components of the induction program. However, the mentoring component runs the gamut from that of a buddy system to a partnership with a highly trained and networked practitioner (Bartlett & Johnson, 2010).

Herein lie the advantages and disadvantages of mentorship. Mentorship is beneficial to the novice teacher when the mentor is properly trained. It is suggested that “lateral capacity-building promotes learning together and from one another” (Fullan, 2011). Ideally, common time allotted for reflection, sharing, shadowing, two-way observation, and two-way feedback create the partnership intended as a support in the induction program (Kardos & Johnson, 2010; Perry & Hayes, 2011). On the other hand, mentor to inductee mismatch, lack of meetings, lack of follow-up, and off-site mentoring are the most common detriments to mentor-inductee relationship (Hallam, Chou, Hite, & Hite, 2012; Kardos & Johnson, 2010; Perry & Hayes, 2011).

***Professional development.*** A universal truth is that induction matters (Allen, 2013a). It matters in the retention and satisfaction of new teachers. What is not known

however, is the extent to which it impacts teacher performance and student achievement. New teachers benefit from orientation as they become acclimated to the expectations and operations of their new environment. However, “keeping new teachers in teaching is not the same as helping them become good teachers” (Feiman-Nemser et al., 1999, p. 25). Along the same lines, attrition is not undesirable when considering the retention of sub-par teachers. This seems like common sense until one considers the plight of urban and rural attrition. In both cases it is imperative to hire, retain, and foster quality teachers with effective professional development (Perry & Hayes, 2011). The components of effective professional development entail a focus on academic content and a determination of what impacts both student and teacher learning (Allen, 2013).

Professional development, a very broad and multi-faceted term, is most effectively delivered when it is relevant to the needs of the organization and its members. Induction programs often default to topics most easily represented, such as policies and procedures, rather than supporting new teachers’ greatest needs; most complex among them are interacting with students and impacting their learning. While the induction program is characterized as everything from support-provider to professional developer (Hulingaustin, 1992), it is important that a differentiated model does not relay the message that teaching is done in isolation (R. M. Ingersoll & Strong, 2011). Meeting the needs of the individual while incorporating them into the life and work of the organization is essential for the health of the individual and school community. It is further suggested that asking inductees what professional development is most beneficial will not yield a good recommendation since novice teachers do not know what they do not know (Kane & Francis, 2013).



The literature is clear about what induction programs provide, but what is lacking in clarity is the impact of induction on teacher performance, and ultimately, student learning and achievement.

### **Stream #3: School Climate and Culture**

School climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures.

A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values and expectations that support people feeling socially, emotionally and physically safe. People are engaged and respected. Students, families and educators work together to nurture an attitude that emphasizes the benefits of, and satisfaction from, learning. Each person contributes to the operation of the school as well as the care of the physical environment. (National School Climate Council, 2007, p. 1)

The definition above has been recommended by the National School Climate Council (2007) and aptly encompasses the descriptors used in most of the research within this literature review. School culture, on the other hand, refers to social interactions, myths, and rituals that are distinguishing marks of the organization (Van Houtte & Van Maele, 2011). Climate encompasses culture (Tagiuri, Litwin, Barnes, & Harvard University. Graduate School of Business Administration, 1968) and while it does, climate includes physical surroundings, characteristics of individuals and relationships (Bradshaw, Waasdorp, Debnam, & Johnson, 2014; Van Houtte & Van Maele, 2011).

It is debatable whether climate and culture should be used interchangeably, but for the purpose of this study culture will be considered to include three levels of abstraction (Parsons, 1951; Schein, 1992):

1. Visible objects (buildings, actions, routines)
2. Values-based ideals
3. Underlying assumptions (subconscious expectations)

It is within this realm that novice teachers become introduced into an organization and possibly into the profession for the first time. It is also within this realm that the new teacher's pre-service training and intrinsic motivation intersect to create classroom practice. The novice teacher is assigned a mentor as part of the induction program in assisting with the introduction to best practices. While mentor responsibilities usually have a positive impact on new teacher retention, it is unclear what mentors should do and what novices actually learn (Feiman-Nemser et al., 1999). Alternatively, some would suggest that the goal of mentoring should be to develop effective teachers who learn effective teaching strategies (Glover & Mutchler, 2000).

A well-executed induction program can never compensate for poor school climate and culture (Feiman-Nemser et al., 1999). Working conditions, including administrator provision, have been associated with teacher retention, and the "lack of administrative support, poor student discipline and student motivation, and the lack of participation in decision-making" (R. M. Ingersoll, 2001, p. 32) were identified as reasons for teachers leaving the profession. The study by Wynn, Carboni and Patall focuses on working conditions and principal leadership separately. Wynn (2007) concluded that working conditions and principal leadership made a significant impact on teacher retention. While not within the control of the principal, salaries were also considered a factor in teacher retention. Wynn (2007) also notes that beginning teachers place more emphasis on salary, whereas veteran teachers tend to emphasize working conditions.

Positive school climate is also influential in three types of teacher commitment: greater general professional commitment; future professional commitment; and organizational commitment (Collie et al., 2011). Studies suggest that teachers with weaker commitment to either organization or profession make few plans to improve the quality of their teaching practice (Firestone & Pennell, 1993). Likewise, greater teacher commitment positively affects student engagement, student effort (Louis, 1998), and student achievement (Firestone & Pennell, 1993). Principals acknowledging and fostering teacher commitment is a cause and effect relationship; greater commitment causes better teaching performance, diminishes burn-out (Park, 2005), and positively influences student learning.

The safety of students and staff contributes significantly to school climate as the school community prioritizes the social, emotional, intellectual, and physical well-being of its members (Collie et al., 2011). In studying school climate, researchers look at the expression of shared values, beliefs and expectations, including rituals, symbolism, myths, and traditions that contribute to the overall climate of the building (Jurasaitė-Harbison & Rex, 2010; Tschannen-Moran & Tschannen-Moran, 2011; Van Houtte & Van Maele, 2011). These beliefs and practices, for the purposes of this study, are referred to as school culture.

Student academic achievement is frequently attributed to positive school climate and culture (Tschannen-Moran, Bankole, Mitchell, & Moore, 2013) since school-wide factors center on student mobility (Collie et al., 2011), student – teacher relationships, and administrative support (Collie et al., 2011). Together, school culture encompassed by

school climate shape an effective teaching and learning environment where cooperative learning, consistency, respect, and trust strengthen teacher commitment.

### **Summary**

Retention of quality teachers is an undeniable challenge at the national level, particularly in urban environments. However, keeping good teachers should be one of the most important agenda items for any school leader. Substantial research evidence suggests that well-prepared, effective teachers have the largest impact on student learning (Allen, 2013; Jensen, 2013; Perry & Hayes, 2011). As an organization increases its investment in new teachers, specifically in the areas of induction practices, mentorship, administrative support, and school climate and culture, self-efficacy is believed to rise. Higher self-efficacy presents itself in individuals who are committed, confident, and open to the challenges of raising and maintaining student achievement.

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## **Chapter 3: Research Methodology**

### **Introduction**

The purpose of this research study was to examine new-teachers' perceptions regarding the effective characteristics of the induction program on their self-efficacy. In a 12-item survey, accompanied by a 9-item priority list, new staff members hired by the district since August 2011 were asked to reflect quantitatively on two ideas. The survey elicited a self-appraisal of their sense of efficacy with regard to student engagement, instructional practices, and classroom management. The accompanying rank order list was one that prioritized the discrete components of the induction program with regard to their influence on teacher self-efficacy. The second method utilized in the study, teacher interviews, focused on new-teacher descriptions of self-efficacy goals in regard to the district induction program.

At the heart of the study was an examination of the individual teacher's belief that he or she had the capabilities to control certain effects in the classroom such as motivating students to value learning and to show interest in school. The teachers were asked what control, if any, they had over instructional strategies such as being able to craft good questions for students or to implement alternative strategies in the classroom. They were also asked for their beliefs in their capabilities to impact classroom management by controlling disruptive behavior and getting children to follow school rules. Having arrived at the heart of teacher self-efficacy, the question was then explored with new teachers, "How is this self-efficacy influenced by induction?"

As part of the interview phase of the study, participants were asked about their experiences with the induction program including one final open-ended interview question about recommended additions to the program. After studying the results of both the survey and the follow-up interviews, the district will be able to better assess budgeting allowances for, or making adjustments to, the existing program as well as reallocating funds to the most effective induction components.

Utilizing a mixed methods approach to data collection, the central question of this study is as follows:

How does the district induction program contribute to the self-efficacy of new teachers, years one through five?

Sub-questions:

1. How does the district induction program contribute to new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the Teacher Sense of Efficacy Scale?
2. How do new-teachers describe their attainment of self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) from the district induction program?

This chapter further details the study's mixed method research design, rationale, methodology, site and populations, and ethical considerations. The researcher develops a rationale for the use of both quantitative and qualitative measures, and fully describes the methods of data collection and data analysis. The details of the study site's demographics and relative locale are described, as is the study's population. Regarding

the study's population, the researcher outlines the criteria for participation in the study as well as the ethical considerations surrounding the subjects and their voluntary involvement in the study.

### **Research Design and Rationale**

To get both a broad perspective of the effects of induction, as well as an in-depth look at select cases of new teachers, years one through five, a mixed methods approach was constructed for this study (Maxwell, 2013; Roberts, 2010). One researcher aptly defines the mixed method approach as consisting of “the quantitative that implicates determining how much of an entity there is, while the qualitative is involved in describing the constituent properties of an entity” (Gelo, Braakmann, & Benetka, 2008, p. 266). This particular methodology integrated, interpreted, and blended results, leading to more complete and insightful answers to the research questions. The complementary approach of both a quantitative and qualitative design, especially in the field of education, provided results with greater breadth and depth. “Combining WHAT with a possible WHY adds power and richness to your explanation of the data.” (Roberts, 2010, p. 113)

The quantitative component included the distribution of a survey to new teachers who had completed the 3-year induction program or who were currently in the induction program. While the induction program is a 3-year program, the researcher chose to include teachers two years beyond completion of the induction program. The purpose for doing so was twofold. First, the inclusion of five years of new-teacher cohorts increased the sample size in order to minimize sampling error (Creswell, 2014). Second, the individuals in the increased sample could still be referred to as “new teachers.”

The choice to administer a survey was driven by the opportunity to study the beliefs and opinions of an entire group, at a point in time, with regard to self-efficacy and the induction program. While survey results generally lend themselves to the correlation of independent and dependent variables, the purpose of the survey in this study was to focus on learning more about the population and less on relating variables or predicting outcomes.

Considered Phase 1 of a two-phase model, or a sequential explanatory design (Creswell, 2013), the researcher distributed a survey to 102 employees hired since August 2011 in a suburban school district in southeastern Pennsylvania. This survey, the Teacher Sense of Efficacy Scale (TSES), accompanied by a 9-item rank order list sought to answer the research questions regarding both teacher self-efficacy and a perceived effectiveness of the discrete components of the induction program. The TSES allowed the researcher to answer the research questions regarding self-efficacy, while attempting to be devoid of bias and emotion. The quantitative results described the trends and relationships among new-teacher self-efficacy beliefs as they applied to student engagement, instructional practices, and classroom management.

This design was built on the rationale that “the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection, is needed to refine, extend or explain the general picture.” (Creswell, 2013, p. 104) The researcher’s experience with the district’s board of directors and administration contributed to the decision to move toward a quantitative data-driven study. This survey component, complemented by the voiced perceptions of



new teachers, would appeal to district leadership's preference for objectively conducted assessments.

Having completed Phase 1 of the two-phase model, the researcher conducted follow-up interviews that explained, clarified, or elaborated on information gathered in the survey. Considered Phase 2 of the model, the researcher elicited volunteers from among the survey participants. Since the survey included a request for a voluntary in-person follow-up interview, the qualitative component of the study was intended to be a random sampling of participants. Obtaining at least one, and as many as two representatives from each of years one through five cohorts, the sample size was sufficient to identify themes (Creswell, 2013) among the cohorts when answering research questions regarding the induction program's influence on new-teacher self-efficacy goals and the attainment of those goals from the induction program. In the study's random sample, the researcher selected interviewees in the order in which their survey response was received, and scheduled an interview. In the case of an interviewee who was employed under the direct supervision of the researcher, the interviewee was scheduled to be interviewed by an honest broker.

The goal of this qualitative component was not to generalize the findings regarding the impact of the induction program on new-teacher self-efficacy goals, but to transfer what is known to similar settings and similar populations (Kvale & Brinkmann, 2009). The researcher intended to learn more about the overall impact of the induction program on new-teacher self-efficacy regarding student engagement, instructional practices, and classroom management.

## **Site and Population**

### **Population Description**

The population of this study consisted of approximately 102 professional staff who had been hired since August 2011 in a suburban school district in southeastern Pennsylvania. This group included both general and special education teachers as well as one school psychologist, one guidance counselor, and one speech clinician. The participants spanned grades kindergarten through twelfth and represented 31% of the district's professional staff. All of the study's subjects had either completed, or were in the process of completing, a district-mandated 3-year induction program.

A seniority list of professional staff was provided by the district Human Resource department and all staff hired from August 2011 to May 2016 were identified as subjects. Upon further consideration, the researcher removed the school counselor, guidance counselor and speech clinician from the study population since the instrument used in the study was relevant to classroom teachers. It was believed that including non-teaching staff would skew the results of the survey that measured teacher self-efficacy in the classroom setting. While interview responses would have provided valuable feedback to the district regarding the differentiated induction needs among the non-teaching staff, they would not have adequately answered the research questions.

An invitation to participate in follow-up interviews was extended to all survey participants. Nine participants, one or two from each year of hire, 2011 - 2015, were interviewed on the basis of the order in which their surveys were received. A subject who agreed to be contacted for a follow-up interview was able to note the agreement on the survey itself. As surveys were returned, the date and time were recorded, constituting the

order of receipt. In the event that a volunteer was unable to schedule an interview, the order of the pool of volunteers remained intact, and the next individual in the order was contacted. Similar to a case study, the follow-up interviews in this study were meant to provide thick, rich descriptions (Kvale & Brinkmann, 2009) that helped the researcher understand the impact of the induction program on teacher self-efficacy (Creswell, 2013; Kvale & Brinkmann, 2009).

### **Site Description**

This study was conducted at a suburban school district 28 miles northwest of Philadelphia, Pennsylvania. Encompassing two townships and one borough municipality, the district covers 22 square miles and serves approximately 4,900 students, ages 5 - 21. Of these students, approximately 3,900 are enrolled in one of the district's schools: 1 kindergarten center, 3 elementary schools, 1 middle school, and 1 high school.

The district draws from middle class and upper middle class communities with a total population of 32,525 within the district boundaries. The median yearly income is \$89,943 and the median home value is \$266,333 (U.S. census bureau. 2014). The 2015 – 16 budget for the district is over \$85 million, and per pupil spending is approximately \$12,800. While the demographic breakdown of the study site is 82% White, 8.8% Black, 5% Hispanic, 3.8% Asian and 0.1% American Indian (Public School Review, 2014), the professional staff demographic is 94.6% White, 1.5% Black, 3% Hispanic, and .9% Asian.

### **Site Access**

The researcher contacted the site's Superintendent of Schools in February 2016 and asked for approval to conduct a study entitled, "Exploring Induction: An

Examination of New-Teacher Perceptions of Environmental Factors Affecting Self-Efficacy.” At the February Personnel Committee Meeting, the Superintendent put forth the request, and it was recommended for approval at the upcoming School Board meeting. Subsequently, the wording in the title has changed to reflect a more descriptive title, “Exploring Induction: An Examination of New-Teacher Perceptions Regarding the Contributions of the Induction Program to Self-Efficacy in a Suburban School District in Southeastern Pennsylvania.”

Access to the site included access to the district seniority list that indicated the date of hire and certification, the email server, and the permission to solicit staff participation. The researcher made a clear commitment to ensure that any staff participation was unrelated to job status or job performance, and that all information would be considered privileged and confidential and would not be shared beyond the scope of the research.

Since the researcher is a current district administrator, special care was taken to avoid conversation regarding the topics of self-efficacy and induction with potential study participants. To encourage authentic participant responses and to discourage researcher bias, the survey was sent through Survey Monkey® where responder identification was unknown. Additionally, with regard to the face-to-face interviews in Phase 2, volunteers who were currently under the direct supervision of the researcher were interviewed by an honest broker. Ultimately, the district may benefit from the results of this study as budgets are created for various induction activities, programming, and any changes, alterations, deletions, or additions to the program.

## Research Methods

### Description of Each Method Used

**Teacher sense of efficacy scale (TSES).** A well-researched and validated measure of a teacher's belief of his or her own efficacy in influencing student engagement, instructional practices, and classroom management is the Teacher's Sense of Efficacy Scale (TSES). The instrument originally known as the Ohio State Teacher Efficacy Scale (OSTES), was the result of a seminar on self-efficacy in teaching and learning at Ohio State University's College of Education. While it was developed at Ohio State University and is commonly known as OSTES, the authors actually prefer the name Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran, Hoy, 2001).

The Ohio State University seminar participants were tasked with developing an instrument that would assess both teacher competence and the analysis of a task. Grounded in Albert Bandura's "social cognitive theory in which a person assesses the likely consequences of the performance level he or she expects to achieve," (Tschannen-Moran & Hoy, 2001, p. 787) the TSES resulted in both a short (12 items) and a long survey (24 items) form on a 9-point Likert scale. The survey authors indicate that the long survey is commonly used for pre-service teachers, and the short form is used for in-service teachers. The survey asks teachers questions about "how much" they can do regarding student engagement, instructional practices, and classroom management.

The TSES was used and tested in three separate studies. Measuring student engagement, instructional practices, and classroom management, the survey was found to have subscale reliabilities of 0.91 for instruction, 0.90 for management, and 0.87 for

engagement. Intercorrelations between the subscales were 0.60, 0.70, and 0.58, respectively ( $p < .001$ ) (Tschannen-Moran & Hoy, 2001).

The TSES was also examined alongside two other existing measures of teacher efficacy. The first comparison was with Rand items, focusing on the extent to which a teacher believed that his or her own ability to instill motivation and impact student learning was internally controlled. The second comparison was with the Hoy and Woolfolk efficacy scale which measured self-efficacy beliefs that teachers can affect positive student change. The total scores on the TSES were positively related to both the Rand items as well as the Hoy and Woolfolk scale.

Both valid and reliable, the TSES measures two essential components of teacher self-efficacy, “personal competence and an analysis of the task in terms of the resources and constraints in particular teaching contexts.” (Tschannen-Moran & Hoy, 2001, p. 795) In mid-April, the short-form (12 item) survey was distributed to all district teachers hired by the district after August 1, 2011. The survey was conducted electronically through Survey Monkey® (a web-based service) and was uncomplicated in its dissemination through email with an embedded link, and was conducive to participation in a school district setting. Responses were web-based and awaited analysis and interpretation upon the researcher closing the online survey.

**Face-to-face interviews.** An invitation to participate in a follow-up face-to-face interview was extended to all survey respondents. This sequential data collection sought to answer the research question, “How is the self-efficacy of new-teachers, years one through five, affected by the district induction program?”

Based on the data analysis of the survey, interview questions referencing the area(s) with the highest level of self-efficacy were posed to each participant. The interview questions, found in Appendix D, on page 116, were developed with the research questions in mind (Table 2, page 45). Five to ten participants, one or two from each year of hire, 2011 - 2015, were interviewed on the basis of the order in which their surveys were received. That is, a participant who agreed to be contacted for a follow-up interview noted the agreement on the survey itself. As surveys were returned, date and time were recorded, constituting the order of receipt. In the event that a volunteer was unable to schedule an interview, the order of the pool of volunteers remained intact, and the next individual in the queue was contacted. In the case where an interviewee was under the direct supervision of the researcher, an honest broker was enlisted to conduct the interview.

The interviews were recorded in an mp3 format and addressed research questions regarding how the district's induction program impacted new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the TSES and how new teachers described their attainment of those self-efficacy goals from the district's induction program.

Using a semi-structured interview protocol, the researcher was able to focus responses on the induction program and self-efficacy, yet had the liberty of asking supplemental questions for the purpose of gathering more in-depth information (Miles, Huberman, & Saldana, 2014). While it may be suggested that a certain amount of personal interpretation and bias on the part of the interviewer exists (Kvale & Brinkmann,

2009; Miles et al., 2014), the researcher pursued a line of questioning that better illustrated information gathered to answer the research questions.

**Table 2**  
*Interview Questions in Relation to Research Questions*

Interview Questions	Research Questions	
	How does the district induction program impact new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the Teacher Sense of Efficacy Scale?	How do new-teachers describe their attainment of self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) from the district induction program?
Describe your first year experiences in the induction program.		✓
(If applicable) Compare and contrast with Year One, your subsequent experiences in years two and three.		✓
Reflecting on your Induction Program, which Induction activities do you perceive contributed to your self-efficacy with regard to student engagement? With regard to instructional practices? With classroom management?	✓	✓
What additions do you think would enhance the Induction Program in developing teacher self-efficacy?	✓	✓
Is there anything that you would like to add regarding the Induction program?		✓



The mp3 recording was sent electronically to *rev.com* (a web-based site for transcription) and saved for future coding and analysis. The anticipated length of each interview was approximately 30 minutes.

### **Data analysis procedures**

Using the data provided by the survey (TSES's individual means for the 12-item survey) and SPSS software, mean scores were determined to describe trends in levels of self-efficacy with regard to subjects' years of certification and years of district experience. Statistical significance of  $p < .05$  was used to determine that significant differences existed among the independent variables, length of certification and experience, and the dependent variable, level of self-efficacy. The results of the survey item that required the responder to rank induction practices in order of "influence on self-efficacy" was to be used for background knowledge in assisting the researcher to develop sequential follow-up questions during a live interview.

The interview transcripts required two different types of coding. First cycle coding employed "in vivo" coding, labeling embedded words and phrases, leading the researcher to discover repetitions, trends, and indigenous terms. Second cycle coding, or pattern coding, allowed the researcher to elicit emergent themes from the transcribed interviews (Miles et al., 2014). *Rev.com*, an online transcription service, provided electronic copies downloadable to NVivo Starter, an online subscription for coding and categorizing written text.

It was hoped that the results of this study would contribute to a broader discussion of new-teacher self-efficacy as it affects student engagement, instructional practices and

classroom management. Ultimately, efforts to increase teacher self-efficacy will lead to an increase in student learning and achievement (Strong, 2009).

### **Stages of Data Collection**

**Phase 1 – survey distribution.** Upon Institutional Review Board (IRB) approval, the researcher administered the TSES survey to approximately 102 teachers, who had been hired in the district since August 2011. These individuals were identified by a seniority list provided by the district’s Human Resource department. While an email distribution list was created for organizational purposes, no “read receipts” options were used while communicating with the potential participants. The participants received two emails. The first email was generated by the researcher and included the following:

- An explanation of the purpose of the survey;
- An embedded link to the survey;
- A guarantee of anonymity and confidentiality;
- A request that the survey be returned within a two-week period;
- A guarantee that the study was unrelated to job status and performance; and
- An offer to participate in face-to-face follow-up interviews.

The second email from the researcher was disseminated to all participants during the second week, thanking those who had completed the survey and encouraging those who had not completed the survey to do so prior to the mid-May deadline.

Of those surveyed, the researcher sought follow-up interviews with 5 to 10 participants, 1 or 2 individuals from each hiring year who would adequately provide a ‘voice’ to the data while explaining, elaborating, or clarifying some of the survey

responses. Table 3, below, describes the timeline for the study that allowed for the completion of a the 2015-16 induction program.

**Table 3**

*Anticipated Timeline of the Study*

	Winter 2015	Spring 2016	Summer 2016	Fall 2016	Winter 2016
IRB Certification Process		✓			
Permission to conduct study	✓				
Participant Identification	✓				
Survey Administration/Collection		✓			
Conduct Interviews		✓			
Analyze/Code Data			✓		
Discuss & Review Findings			✓	✓	
Dissertation Writing of Findings			✓	✓	✓

**Phase 2 – personal interviews.** Person-to-person interviews occurred after the survey had been disseminated and the responses returned. The survey included an additional question as to whether or not the participant was willing to participate in a face-to-face interview regarding the contributing factors to self-efficacy. All positive responders received an invitation to participate in a personal interview with 4 or 5 questions that would clarify, elaborate or explain what was covered in the survey. The email recipients were asked to respond to the email with contact information and the most convenient time to set up a meeting. As the emails were returned, they were categorized

according to hiring year and building location. The first and second respondents for every hiring year were accepted automatically and subsequent interviews were scheduled.

### **Ethical Considerations**

Anchored in three basic ethical principles of respect for persons, beneficence, and justice, the Belmont Report (1979) guides researchers in their work with human subjects. This study, too, incorporates the same principles regarding the teachers involved in all components of the study. Respect for persons and beneficence receive special consideration in this study's educational setting.

“Respect for persons” is fundamentally perceived as autonomy that is afforded human subjects and their capability of self-determination (Belmont, 1979). In eliciting written responses to the online survey and verbal responses to the face-to-face interviews, the subjects were, at all times, given complete autonomy in participating in the study. Explicitly stated, all notifications of the subjects' rights were disclosed in a consent form (Appendix C, page 115) prior to a face-to-face interview. Related to their autonomy, the adult participants in this study were capable of self-determination, unlike children and individuals whose diminished capacity for decision-making would require additional safeguards for protection against physical or emotional harm. The survey was anonymous and only upon the self-reporting of contact information would the responder be identified. All information of identified participants will continue to remain strictly confidential and will be referred to as “Interviewee 1” through a possible “Interviewee 9”. All participants were asked to identify the number of years they were licensed and the number of years they had taught in the district. Additionally, no information was shared outside the scope of the research.

“Beneficence” refers to the treatment of individuals that minimizes harm and maximizes possible benefits (Belmont, 1979). It is this ethical principle to which the researcher has carefully adhered. Kvale (2006) discusses the issue of power and knowledge as domination in a research interview. He posits that the interviewer “upholds a monopoly of interpretation” (Kvale, 2006, p. 15) and may tend to manipulate the conversation toward the researcher’s prior knowledge, background, and expertise. It was this researcher’s intent to discover, with authenticity, the most impactful induction practices on teacher self-efficacy.

As a district administrator interviewing new teachers, the researcher took great care to make the participants comfortable and at ease regarding their self-efficacy and involvement in the induction program. The researcher attempted to establish and safeguard a trust with the interviewee. Glesne and Peshkin (1992) found the following:

Trust is the foundation for acquiring the fullest, most accurate disclosure a respondent is able to make . . . In an effective interview, both researcher and respondent feel good, rewarded and satisfied by the process and the outcomes. The warm and caring researcher is on the way to achieving such effectiveness. (Glesne & Peshkin, 1992, p. 110)

Based on this trust, the researcher hopes to convey the benefits of the study’s findings on future new-teacher cohorts.

The third ethical principle of maintaining a sense of justice, while important, is not relevant in this study. The study’s design does not lend itself to unfair or unequal treatment of the participants, and the benefits of the study have the capacity to improve the effectiveness of the induction program for all new teachers.

The researcher submitted the research proposal to the Institutional Review Board (IRB) in April 2016 after having received permission to conduct research on site in the district (Appendix A, page 110).

### **Summary**

This mixed methods study was designed to examine the contributing factors of the induction program on new-teacher self-efficacy in a suburban school district in southeastern Pennsylvania. Upon IRB approval, the researcher distributed a survey, consisting of the Teacher Sense of Efficacy Scale and a survey item created for the participant to rank induction practices in the order of perceived influence on self-efficacy. Follow-up interviews were scheduled and conducted with the intent to learn what induction practices impact self-efficacy goals and the continued attainment of such goals.

Using SPSS software to analyze Phase 1 survey items, data analysis included a comparison of mean scores to examine the trends among years of licensure, years of experience, and level of self-efficacy. NVivo Starter, a web-based subscription, was used in coding and analyzing Phase 2 interviews.

Also addressed in this chapter were details of the study's site, population, research design, methodology and ethical considerations.

## Chapter 4: Findings, Results, and Interpretations

This study was intended to examine new-teacher perceptions of the contributing factors of a school district's induction plan on new-teacher self-efficacy goals of student engagement, instructional practice and classroom management. The purpose of the study was achieved through the completion of the Teacher Sense of Efficacy Scale (TSES), a rank order of the influential components of the induction program, and face-to-face interviews with representatives from the groups of teachers having been hired since August 2011. This chapter presents the data analysis for the central research question, "How does the district induction program contribute to the self-efficacy of new teachers, years one through five?"

The first sub-question, "How does the district induction program contribute to new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management)?" was answered with the administration of the TSES and the solicitation of a rank order of the induction program components as they contribute to new-teacher self-efficacy. Demographic information was also collected and allowed the researcher to provide descriptive statistics for each group of newly-hired teachers.

The second sub-question, "How do new-teachers describe their attainment of self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) from the district induction program?" was addressed through the face-to-face interview questions. Using NVIVO Starter, a coding software for qualitative analysis, the responses were coded and analyzed to provide not only an answer to the research sub-question, but also the clarification and explanation for the study's findings.

While induction programs vary in length and intensity, they are commonly intended to introduce, or orient, new staff to the organization, support new staff in their performance, and develop or enhance best practice in the workplace (Strong, 2009). The district's induction program, home to the study, is three years long. The first year is comprised of orientation activities that introduce the new hire to district operations, professional support, and development. In year one, the inductee is assigned a paid mentor, and together they are given opportunities for guidance, collaboration, and reciprocal observations. In addition to building level support, the inductee attends monthly meetings with other members of the first-year cohort under the direction of the induction program coordinator. First year cohort activities include professional development in teacher effectiveness, evaluation, and supervision.

In year two, inductees participate in a professional learning community (PLC) focusing on student engagement. During this period, they study, design, and implement research-based strategies for increasing student engagement while maintaining documentation of practice, self-reflection, and professional learning. While the mentor – inductee relationship is encouraged and the administrative support continues, mandatory reciprocal mentor / inductee observations and monthly meetings are discontinued.

In year three, the year of attaining tenure, the inductee meets quarterly with a building-level administrator and continues to maintain evidence of developing professional practice. Submission of an induction binder, authenticating the teacher's learning and implementation of enhanced professional practice, marks the conclusion of the induction program. In the absence of a just cause for withholding tenure, the new



teacher obtains tenured status on the first day after the third year anniversary of the date of hire.

## Findings

### Population

Phase 1 of this study was conducted among teachers having been hired since August, 2011. Of the total population invited to participate, 28% responded and completed the TSES survey in the spring of 2016. It is noteworthy that the largest hiring year, 2015, yielded the second to smallest cohort representation, and conversely, the smallest hiring year, 2011, yielded the largest cohort representation.

**Table 4**

*Cohort Representation as Determined by Survey Responses.*

#### 5- Year Cohort Response Survey Rate

	<i># of Professional Staff Hired</i>	<i># of Survey Respondents</i>	<i># of Survey Complete</i>	<i>Cohort Representation</i>
<b>1-Aug-2011</b>	7	3	3	43%
<b>1-Aug-2012</b>	10	4	2	20%
<b>1-Aug-2013</b>	22	10	7	32%
<b>1-Aug-2014</b>	21	10	8	38%
<b>1-Aug-2015</b>	42	12	9	21%
	102	39	29	

The researcher solicited demographic information regarding the number of years that the respondent was employed by the district as well as the number of years the respondent had been licensed. Table 5, on page 56, displays the respondents'

demographic information, as well as the mean and median self-efficacy scores. As displayed in Table 4 on page 54, the respondents are classified as cohorts based on the year of hire. Within each cohort, individuals are identified as newly certificated, one year's experience, two years' experience, three years' experience, four years' experience, or five or more years' experience in the position for which they were hired. Eliciting the number of years licensed has contributed to the qualitative analysis found later in this chapter.

The researcher has purposefully used both mean and median scores in the data analysis. The median score, a score with limited usefulness in statistical analysis (Creswell, 2012), was used to minimize the effect of skewed data created by a 5<sup>th</sup> year outlier. Remaining consistent in interpreting data, the researcher used both mean and median throughout the data analysis.

Inductees were asked to self-assess their efficacy as it was influenced by the district's induction program. They were also asked to rank, in order of influence, the major components of the induction program. By the end of June 2016, nine respondents had been interviewed face-to-face in Phase 2 of the study. Phase 2 sought to clarify and expound upon the information gathered in Phase 1 with regard to the contributing factors of the induction program and it also served as an opportunity to view the survey results with a different perspective. The findings, results and interpretations of the survey, the rank order placement of the components of the induction program, and the subsequent interviews will continue to be addressed throughout this chapter.

**Table 5**  
***Cohort Demographics and TSES Mean and Median Scores.***

<b>Statistical Variance Among Cohorts</b>					
<b>Teacher Sense of Efficacy Scale (TSES)</b>					
Yrs. Employed	Yrs. Licensed	Mean	N	Std. Deviation	Median
<b>1</b> <b>Year 1</b> <b>Cohort</b>	1	8.08	1		8.08
	3	9.00	1		9.00
	4	7.63	2	.177	7.63
	5	7.62	5	.776	7.50
	Total	7.82	9	.723	7.75
<b>2</b> <b>Year 2</b> <b>Cohort</b>	1	8.67	1		8.67
	2	7.67	1		7.67
	3	7.19	3	.966	7.67
	4	7.92	1		7.92
	5	7.50	2	.236	7.50
	Total	7.60	8	.725	7.67
<b>3</b> <b>Year 3</b> <b>Cohort</b>	4	7.58	2	.354	7.58
	5	7.57	5	.817	7.42
	Total	7.57	7	.683	7.42
<b>4</b> <b>Year 4</b> <b>Cohort</b>	4	6.92	1		6.92
	5	7.25	1		7.25
	Total	7.08	2	.236	7.08
<b>5</b> <b>Year 5</b> <b>Cohort</b>	5	6.83	3	2.892	8.33
	Total	6.83	3	2.892	8.33
<b>Total</b>	1	8.38	2	.412	8.38
	2	7.67	1		7.67
	3	7.65	4	1.199	7.75
	4	7.54	6	.375	7.63
	5	7.42	16	1.245	7.46
	Total	7.55	29	1.037	7.67

## **Quantitative Results**

The quantitative analysis for the TSES and the rank order of the influential components of the induction program were completed with Microsoft EXCEL and IBM SPSS software. The researcher used NVIVO Starter in which to code, classify, and organize transcripts for final analysis and interpretation of the qualitative results of this study.

**Teacher sense of efficacy scale.** The overall sense of teacher efficacy among the respondents as a group was moderately high at a median score of 7.67 out of a 9-point scale. The TSES, a 9-point Likert scale, measures self-efficacy in the areas of student engagement, instructional practices, and classroom management. The TSES (Appendix B, page 111) elicits scores of 1 through 9. A score of 1 represents “Nothing” that a teacher can do to influence student engagement, instructional practice, and classroom management; a score of 3 represents “Very Little;” a score of 5 represents “Some Influence;” a score of 7 represents “Quite a bit;” and a score of 9 represents “A Great Deal “of self-efficacy in a particular goal.

The quantitative results derived from the TSES suggest that this particular group of new teachers in the district perceive that, influenced by the induction program, they can control “quite a bit” of the student engagement, instructional practices, and classroom management required to be an effective teacher. In response to the first sub-question, “How does the district induction program contribute to new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the Teacher Sense of Efficacy Scale?” the data suggest that the induction program contributes to the overall self-efficacy of the district’s inductees.

Analyzing the TSES data further, the researcher found differences among the cohorts. Self-efficacy was highest among the year 5 cohort, followed by years 1, 2, 3, and 4. The year 5 cohort represents teachers who were hired between August 1, 2011 and July 31, 2012. At least 2 of the 3 respondents were hired with prior experience, and all of them have participated in and completed the Induction Program. While they have the highest median score of 8.33, the respondents have the lowest mean score of 6.83. With a standard deviation (SD) of 2.89, the data are skewed to indicate an outlier. Under these circumstances, the researcher considered both mean and median scores to display an accurate portrayal of all of the cohorts in the study.

The year 1 cohort, with a median score of 7.75, represents a group of 9 individuals, where 8 of the group were hired with prior experience. Hired between August 1, 2015 and May 16, 2016, year 1 teachers have not only completed one year of the study's district, but also have participated in at least one year of another organization's induction program. With a mean score of 7.82 and an SD of .723, the year 1 cohort is consistent in its perceptions of teacher effectiveness.

Years 2, 3, and 4 cohorts represent a balanced mix of both experienced and inexperienced hires between August 1, 2012 and July 31, 2015. Representing over half of the respondents to the study, their mean scores are 7.60, 7.57 and 7.04 respectively. With respective median scores of 7.67, 7.42 and 7.08, Year 2, 3, and 4 cohort members are consistent in their perceptions of teacher effectiveness.

Upon further analysis of the three characteristics used to measure self-efficacy on this particular scale, it was noted that when using mean scores for student engagement, instructional practices, and classroom management, differences existed among the

cohorts depending upon the content of the survey question. It is also important to note that years four and five were years during which the district hired a total of 17 professional staff. Of these 17 employees, 5 responded and completed the survey. The small number of respondents would continue to impact the interpretation of the results throughout the study.

**Student engagement.** Table 6, below, shows the new-teacher self-efficacy scores using questions 2, 3, 4, and 11 of the TSES as indicators of efficacy in student engagement. Student engagement is a focal topic in the second year induction programming and the researcher was interested in analyzing the nuances of the TSES's treatment of student engagement. The questions assess a teacher's effectiveness in influencing students' motivation, beliefs, values, and family engagement.

**Table 6**  
***Mean and (Median) Scores of Teacher Sense of Efficacy Regarding Student Engagement.***

Cohort	Question 2: <i>How much can you do to motivate students who show low interest in school work?</i>	Question 3: <i>How much can you do to get students to believe that they can do well in school work?</i>	Question 4: <i>How much can you do to help your students value learning?</i>	Question 11: <i>How much can you assist families in helping their children do well in school?</i>
1	7.56 (7)	7.78 (8)	7.56 (7)	6.89 (7)
2	7.75 (8)	7.88 (8)	7.50 (7.5)	6.88 (7.5)
3	7.43 (7)	7.71(8)	7.14 (7)	5.86 (6)
4	6.50 (6.5)	7.00 (7)	7.00 (7)	6.50 (6.5)
5	7.30 (9)	7.0 (9)	7.33 (9)	6.00 (7)
Overall	7.48 (7)	7.69 (8)	7.38 (7)	6.52 (7)

The data are further disaggregated by year of hire, or cohort designation. The TSES measures self-efficacy on a nine-point scale and shows a response range from “I can do nothing” (1) through “I can do a great deal” (9) and seven points in between the outer limits. The scores are reflective of both the mean and median of the TSES’s nine-point gauge.

The researcher sought to minimize the impact on mean scores by the Year 5 cohort outlier, and the median scores, while still considered relatively high, do reflect a general dip in efficacy in student engagement with regard to assisting families in helping children do well in school. While this particular question seems to reflect a similar mean and median score, the researcher maintained the use of mean and median consistently throughout the study. Similarly, the same analysis was completed on instructional practices and classroom management.

**Instructional practices.** Table 7, on page 61, shows the new-teacher self-efficacy scores using questions 5, 9, 10, and 12 of the TSES as indicators of efficacy in instructional practices. The overall results of new-teacher self-efficacy were highest in the domain of instructional practices, and the researcher had the opportunity to deconstruct the range of questions addressing instructional practices. These particular questions deal with the teacher’s ability to develop and use assessments, instructional strategies and their alternates. The data are further disaggregated by year of hire, or cohort designation.

Minimizing the impact on mean scores by the year 5 cohort outlier, the median scores reflect a lower self-efficacy in the instructional practice of implementing alternative strategies in the classroom and a higher self-efficacy in using a variety of

assessment strategies. The year 4 cohort is comparatively lower in self-efficacy in instructional practices, and notably the smallest sample represented by the respondents.

**Table 7**  
*Mean and (Median) Scores of Teacher Sense of Efficacy Regarding Instructional Practices.*

Cohort	Question 5: <i>To what extent can you craft good questions for your students?</i>	Question 9: <i>How much can you use a variety of assessment strategies?</i>	Question 10: <i>To what extent can you provide an alternative explanation or example when students are confused?</i>	Question 12: <i>How well can you implement alternative strategies in your classroom?</i>
1	8.00 (8)	8.33 (8)	8.33 (8)	7.78 (8)
2	7.75 (7.5)	8.13 (8)	7.88 (8)	7.63 (8)
3	8.29 (9)	8.00 (8)	7.71 (8)	7.14 (7)
4	7.50 (7.5)	7.00 (7)	6.50 (6.5)	7.50 (7.5)
5	7.33 (8)	7.33 (9)	7.00 (9)	7.00 (9)
Overall	7.90 (8)	8.00 (8)	7.79 (8)	7.48 (8)

**Classroom management.** Table 8, on page 62, shows the new-teacher self-efficacy scores using questions 1, 6, 7, and 8 of the TSES as indicators of efficacy in classroom management. Efficacy in classroom management is relatively consistent among the cohorts and is not directly addressed in professional development during the induction program. Later qualitative results present the respondents' beliefs that effective classroom management is a result of the professional development in student engagement provided by the district's induction program. As was performed in the previous analyses of student engagement and instructional practices, the data for classroom management are further disaggregated by year of hire, or cohort designation.



Once again, the researcher attempted to minimize the impact on mean scores by the year 5 cohort outlier by using both the mean and median scores. The mean and median scores reflect a lower self-efficacy in the classroom management practice of calming a disruptive or noisy student while reflecting a higher self-efficacy in getting children to follow classroom rules. The year 4 cohort was not notably lower than years 2, 3, and 5 in self-efficacy, even when considering both mean and median scores. Year 1 cohort demonstrated consistency in its perception of high self-efficacy in classroom management.

**Table 8**  
***Mean and (Median) Scores of Teacher Sense of Efficacy Regarding Classroom Management.***

Cohort	Question 1: <i>How much can you do to control disruptive behavior in the classroom?</i>	Question 6: <i>How much can you do to get children to follow classroom rules?</i>	Question 7: <i>How much can you do to calm a student who is disruptive or noisy?</i>	Question 8: <i>How well can you establish a classroom management system with each group of students?</i>
1	8.22 (8)	8.33 (8)	7.67 (8)	7.33 (8)
2	7.50 (7.5)	7.75 (8)	6.88 (7)	7.75 (7.5)
3	7.86 (8)	8.00 (8)	7.57 (8)	8.14 (8)
4	7.00 (7)	7.50 (7.5)	7.50 (7.5)	7.50 (7.5)
5	6.33 (7)	6.67 (8)	6.33 (7)	6.33 (7)
Overall	7.66 (8)	7.86 (8)	7.28 (7)	7.55 (8)

The researcher acknowledges that the quantitative analysis of the TSES is useful only within the limits of this study. The data gleaned from this survey, while referencing a small percentage of the district's staff, may draw attention to the areas of teacher

effectiveness on a broader scale. While the results of the study may not be generalizable to the larger population of teachers within the district, the general exercise of self-assessment of one's efficacy in the classroom is worthy of consideration for the district at large.

**Perceptions of influential components of the induction program.** The second part of Phase 1 allowed the respondents to rank the components of the induction program in the order of influence on their self-efficacy. When asked about ranking induction activities, the respondents used a drop down menu to indicate the order of preference where a 1 was most preferred and 9 was least preferred.

The survey, having been administered electronically through Survey Monkey®, was also the instrument through which the data were initially organized. Survey Monkey® calculates the average ranking choice for each item. The item with the highest average is perceived as the most influential induction activity. Weighted choice is used in reverse order and first preference is weighted with a 9, while the ninth preference is weighted with a 1. Through an item analysis of the individual surveys, the researcher was able to rank order induction components for individual cohorts using Survey Monkey's weighted choice scores. Table 9, on page 64, shows that overall, the inductees ranked the induction activities from having the greatest amount of influence on their self-efficacy to having the least amount of influence on their self-efficacy.

It is interesting to note that among the 29 completed surveys which Survey Monkey® considered complete, 4 surveys included an incomplete rank ordering. Two respondents gave their top 4 preferences and 2 respondents gave their top 5 preferences.

For the purposes of the study, the researcher was interested in the most influential components and the top 4 or 5 preferences would certainly yield the information since Survey Monkey® assigns numerical values as a weighted choice.

**Table 9**  
*Survey Monkey® Scores, Greatest to Least, for the Nine-Item Rank Order of the Influential Components of the Induction Program.*

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	# of Respondents	Weighted Choice
Being assigned a mentor	7	8	1	0	2	3	1	1	0	23	7
Common planning time with colleagues	7	4	3	2	2	1	1	0	2	22	6.68
Administrator support	2	6	4	6	1	0	2	2	0	23	6.3
Classroom observations and feedback	1	3	4	3	5	5	3	1	1	26	5.23
New-teacher meetings with mentors	3	3	6	1	1	6	3	3	2	28	5.18
Professional reading and research	0	1	5	4	4	2	4	3	4	27	4.33
Reduced case load	3	1	1	2	4	2	2	2	6	23	4.26
New-teacher meetings without mentors	2	0	2	2	3	3	5	6	4	27	3.78
Orientation activities	1	1	1	3	3	3	4	4	6	26	3.65

The rank order data are further disaggregated according to cohort, or year of hire.

Table 10, on page 65, displays the components in rank order and further highlights the significant preferences for mentorship, collaborative work, and administrative support at each cohort level within the induction program and the two years beyond the formal program.

**Table 10**  
***Highlighted Analysis of Each Cohort’s Perceptions of the Induction Program’s Most Influential Components as Reported on the Phase 1 survey.***

Year 1 Cohort	Year 2 Cohort	Year 3 Cohort	Year 4 Cohort	Year 5 Cohort
Mentor	Mentor	Mentor	Meetings with mentors	Mentor
Common Planning	Administrative Support	Meetings with mentors	Administrative Support	Common Planning
Reduced case load	Common Planning	Meetings without mentors	Common Planning	Administrative Support
Classroom observations and feedback	Meetings with mentors	Common Planning	Mentor	Reduced case load
Meetings with mentors	Classroom observations and feedback	Administrative Support	Classroom observations and feedback	Classroom observations and feedback
Orientation activities	Professional reading and research	Classroom observations and feedback	Professional reading and research	Meetings without mentors
Administrative support	Reduced case load	Orientation activities	Reduced case load	Professional reading and research
Professional reading and research	Orientation activities	Professional reading and research	Orientation activities	Orientation activities
Meetings without mentors	Meetings without mentors	Reduced case load	Meetings without mentors	Meetings with mentors

## **Qualitative Results**

Nine teachers were interviewed in face-to-face sessions to determine how new teachers describe their attainment of self-efficacy goals from the district induction program. This exercise, considered Phase 2, served as an explanatory relationship for the quantitative findings in Phase 1. While Phase 1 sought to explore new-teacher perceptions of self-efficacy as influenced by the induction program, Phase 2 elicited how teachers attain self-efficacy goals through the induction program.

As quantitative data were disaggregated and analyzed according to years of employment (cohort) and years of experience, the qualitative data were similarly analyzed. This sequential analysis allowed the researcher to explain the attainments of

self-efficacy goals through new-teacher descriptions of their lived experiences within the induction program. Self-efficacy, as measured by the TSES, is further explored with interview questions regarding the induction program's professional development referring to student engagement, instructional practices and classroom management. The articulated competencies found below are rooted in Charlotte Danielson's work on *Enhancing Professional Practice* (Danielson, 2007) and are embedded in the program's workshops, meetings and professional reading.

#### Planning and Preparation

- Knowledge of content, pedagogy, students, and resources
- Instructional goals and outcomes
- Coherent instruction
- Assessment of student learning

#### The Classroom Environment

- A culture for learning
- Respect and rapport
- Management of classroom procedures and physical space
- Management of student behavior

#### Instruction

- Communication with students
- Questioning and discussion techniques
- Student engagement
- Feedback and assessment
- Flexibility and responsiveness

#### Professional Responsibility

- Reflection of teaching
- Record keeping
- Communication with families (Suburban School District in Southeastern Pennsylvania)
- Professional qualities, professional growth, and participation in a professional community

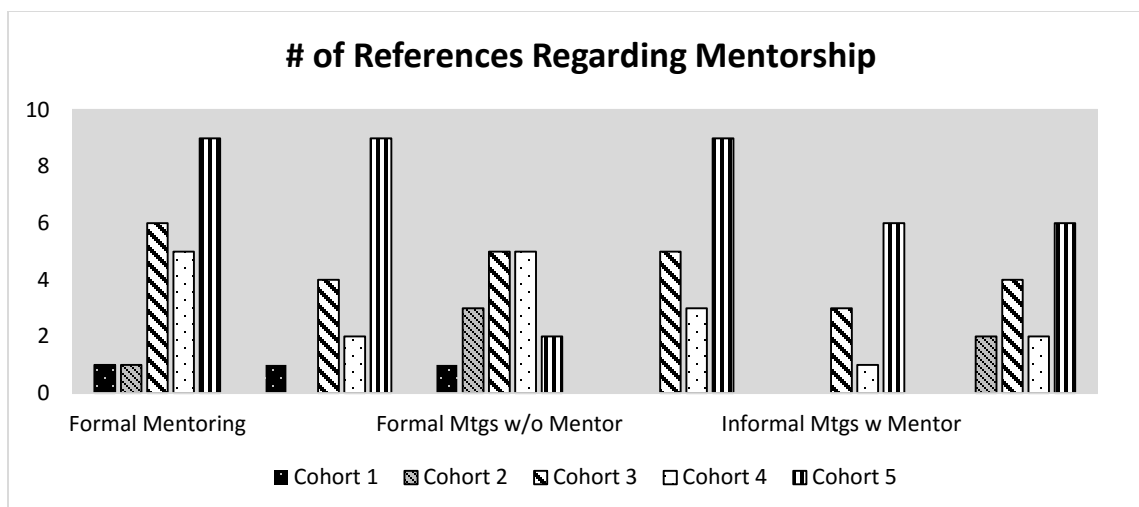
(Suburban School District in Southeastern Pennsylvania, 2016, p. 8)

As the respondents indicated in Phase 1 of the study, the most influential factors contributing to new-teacher efficacy are mentorship, collaboration, and administrative support. The order of the respondents' preferences was elicited through a rank order of

the induction program components in Phase 1, as well as the quantified results of coded references found in Phase 2 interviews.

**Mentorship.** Mentorship covers a broad spectrum of meanings and services, but for the purposes of this study, mentorship represents both position and relationship. While many colleagues offer guidance, advice, and collaboration, only one mentor is formally assigned the position and given the responsibility of a new teacher in year one of the Induction Program. Compensated by the district for a period of one school year, the mentor is expected to serve as a resource and guide through orientation activities and monthly meetings. Additionally, the mentor and inductee participate in reciprocal observation and feedback cycles twice within the first year.

Figure 5, on page 68, represents the number of references regarding mentorship made by inductees, and is organized according to cohort identification. Using NVIVO Starter, the researcher coded comments referring to both formal mentorship, occurring in year one, as well as informal mentorship, occurring in years two and three. References to formal and informal meetings between inductees and mentors were also noted, as well as those suggestions for improvement of the induction program's implementation of a mentor component. It is noteworthy that the year one cohort was represented by one interviewee and the remainder of the cohorts were represented by two interviewees. Years three, four, and five were significantly more responsive to the topic of mentorship than years one and two. Year three and five inductees made respectively, five and ten times as many references to mentorship than year two.



**Figure 5. Number of References Regarding Mentorship Made by Cohort One through Five Inductees**

The interviewees expressed a clear need to maintain the mentor program and with it, the dedicated time allotted for collaboration. In some cases, a desire was noted to extend the period of formal mentorship. This raised two focal points within the theme of mentorship. The first point refers to mentor selection and the second point refers to mentorship duration and intensity.

The current process for assigning mentors in year one is to match the inductee to an individual in the same department or same grade level and in the same building whenever possible. The mentor is to have a minimum of three years teaching experience and tenured in the district. He or she will hold an Instructional II certificate as well as having demonstrated competence in professional practice. The mentor should possess a positive attitude toward the teaching profession as well as a commitment and willingness to guide and coach an adult learner (Suburban School District in Southeastern Pennsylvania, 2016).

As building administration seeks to pair inductees and mentors appropriately, the possibility exists that a pair may not be an optimal fit. While Interviewee 7 expressed it

as, “I felt like my first year (*sic*), I relied so heavily on -----, my mentor. She gave me everything I needed in terms of curriculum, like what do I actually do.” Interviewee 9 said, “I happened to be working with a teacher who was amazing, but as a 33-year veteran she was not interested in a smart board. She was very lovely and awesome.”

This study suggests that the ability to collaborate supersedes position and location. Interviewee 1 commented, “The mentor is very helpful because there are eight thousand questions going on that you just have nowhere else to go for those kinds of things. The building level was also helpful for understanding how the building worked, what the expectations were, and some of the procedures that would be new to anybody coming into the district,” and Interviewee 9 concurred, “She was teaching in this room and I was next door. It was really nice to have her physically close by, which was an improvement on my last district where my mentor was not in my building and made it very difficult. I really appreciated that. I was able to bounce ideas off her constantly.”

Interviewee 9 made the point that position and location may not be ideal and does not account for the needs of a more experienced teacher and she commented,

I think that the biggest thing that I think I could benefit from is bringing in teachers to be resources for that program. Maybe just having them as guests or maybe having them as point people. For example, my mentor was not someone I could go to with technology questions. I learn the most when some other awesome person in the district who's doing something awesome is telling me about it. I can see that it's working. I can see that they're doing it. They're doing it right now with the current technology, and I can email them.

The newly-hired, yet seasoned teacher was aware of navigating building needs, but what she actually needed was collaboration with her mentor to support her passion and goal setting.



Having a “right fit” mentor enhances the working relationship of an inductee and a mentor to include guidance and partnership at a deeper level of professional work (Elliot, 2010). According to Interviewee 8, the mentor relationship evolved from orientation, where “just knowing where to park without making somebody mad is important,” to collaboration, where, “you have a built-in person at your level who has the experience that you could talk things out with.”

The second focal point of mentorship was that of intensity and duration. Both quantitative and qualitative findings show a need and preference for the formal practice of mentorship. The qualitative results articulate the need for a more intensive, and in some cases, a longer inductee – mentor relationship. Some respondents suggested that more time could be allotted for observations and feedback within the school day. Some individuals believed that the time that they spent with their mentors was snatched from the school day when time permitted. On several occasions, the respondents expressed that the meeting time, though valuable, was a burden because of the responsibilities and expectations already placed on the classroom teachers. Ideally, there would be time designated within the school day for inductee-mentor activities. Interviewee 5 mentioned,

Because that (sic) was invaluable. Even maybe extend (sic) that a little bit past your mentor year. I'm in half-day literacy and half-day academic. My mentor is an academic teacher. I would love to go over and see the literacy class, more time to get out and see teachers at work, and then invite them in to see you at work. That feedback is so valuable and so ... You never feel like you're wasting your time with that.

Interviewee 7 added,

Maybe just having more time with them built in. Like if you have a half-day, they have a half-day. Because I know in the beginning, we did (sic). We were with

them. Again, that was more of the welcome and this is what you're doing. That's a crazy time for the mentors too. Trying to set up your classroom, thinking about it from that perspective. It's not a good time for them either to be showing you everything. Maybe providing some carved out time later in the year.

The power of a mentored relationship however, goes beyond the first year of a formal mentor assignment. A strong desire to continue close collaboration, observation and feedback, and guidance was expressed as respondents talked about extending the compensated mentorship beyond the first year. A year three cohort member, Interviewee 3, commented, "I know you have a mentor in years one and two but you really don't get one in year three and you probably still need one in year three."

**Collaboration.** As the coding suggests that new teachers attain self-efficacy goals through mentorship, a significant number of responses were simultaneously coded as collaboration. Particularly in the area of instructional practices, inductees commented frequently about collaboration on curriculum with their mentors. Some commented that they wished more year one activities were earmarked for inductee-mentor work in curriculum and instructional practice. Some inductees, like Interviewee 7, wanted reassurance about what to do in their classrooms, "I feel like it could have been more curriculum-based, or at least linked specifically to what we were doing instead of just general (sic), I needed my mentor. She was so valuable in homework, and in curriculum."

Interviewee 8 believed that,

In terms of instructional practices, I don't think I necessarily learned anything new (from the induction program). I think talking about it, again, talking about with other teachers what they were doing, what they were using, was helpful. Just in terms of my own specific practice, I feel like I got the most out of my grade level, and my partners and my team more so than things that I was doing there (in the induction program).

Even after three years, some grade level team members and former inductee – mentor partnerships gravitated toward common planning time.

The call for collaboration extended beyond the inductee-mentor relationship. Since most mentors are selected on common certification and grade level, collaborative discussion, sharing, and assistance spread to the members of the department and grade level. The formal supports put into place for the new teacher are complemented by informal supports that naturally occur among colleagues at the building level. This study was unable to determine whether informal mentoring among colleagues assisted the new teachers with attaining self-efficacy goals. However, the call for more sharing among colleagues was a frequent comment, especially when asked by the researcher, “What additions do you think would enhance the induction program?” Interviewee 2 reflected,

I think having an opportunity for the new teachers to come with their own questions or their own experiences that they've had problems with, in sort of like a closed setting, and having a discussion about what you could do, what you could do better.

Interviewee 6 suggested that collaboration would have the look of an open forum and commented, “Definitely I would say more emphasis on the opinions of the new teacher,”

Interviewee 9 remarked,

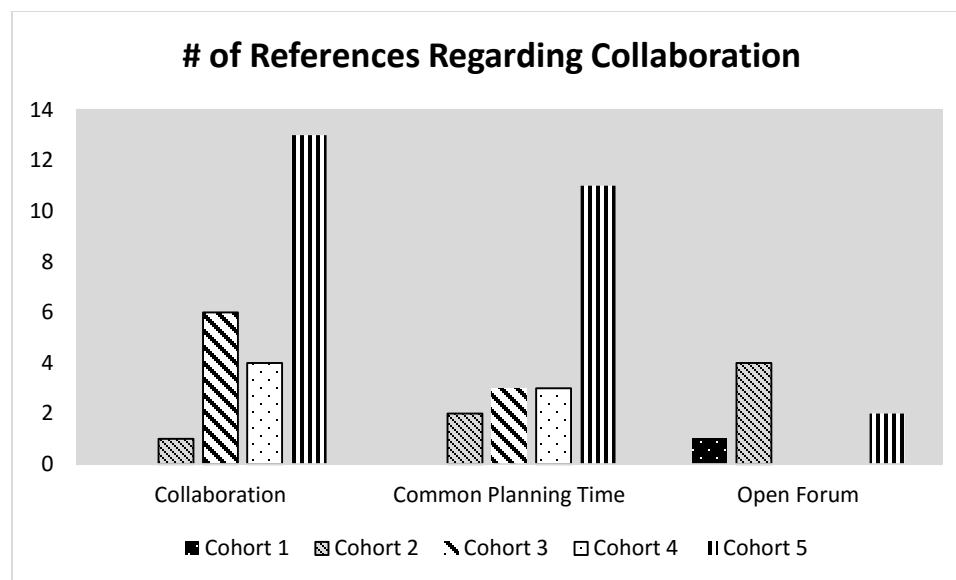
I would've loved something at one point just completely separate from induction. We had a day where ----- had some of the staff present professional development to the other staff. That was by far the most effective thing I had seen the whole time. I learned because teachers said, “Here's what I'm using in my classroom. Here's how I use it. Email me if you have any questions.” That's how I got into Schoology and now I use that exclusively for some of my classes. It was because another teacher brought it up and talked about it, otherwise I would not have known. That wasn't part of the induction program.

Interviewee 9 expressed disappointment that an open forum or sharing was not a ubiquitous part of the induction program and noted,

I thought it took a lot of courage for her as a veteran educator to even admit that she was having classroom management issues. When she did (*sic*) and she said, "The kids are just not responding to me, like, I don't know what to do." The person leading the session did not address it at all, it was as if they had their idea about what they were going to say and just went and did that. I just thought, "There's got to be some aspect of open forum here because you can't always anticipate what people's needs are going to be." That teacher just opened herself up and no one helped her. There were times like that where I just felt like it was just a miscommunication. In my classroom I would never want to be so intent on delivery content that I'm ignoring questions, no matter how different they are from what I imagined.

Figure 6, on page 74, represents the number of references regarding collaboration made by inductees, and is organized according to cohort identification. Using NVIVO Starter, the researcher coded comments referring to collaboration, common planning, and open forum. All three nodes reflected the concept of professional sharing. As previously stated, the year one cohort was represented by one interviewee and the remainder of the cohorts were represented by two interviewees. Years two, three, four, and five were significantly more responsive to the topic of collaboration than year one. Years one, two and five were the only cohorts to mention the need for an open forum among colleagues, while year five continues to double the amount of references for collaboration when compared to years one through four.

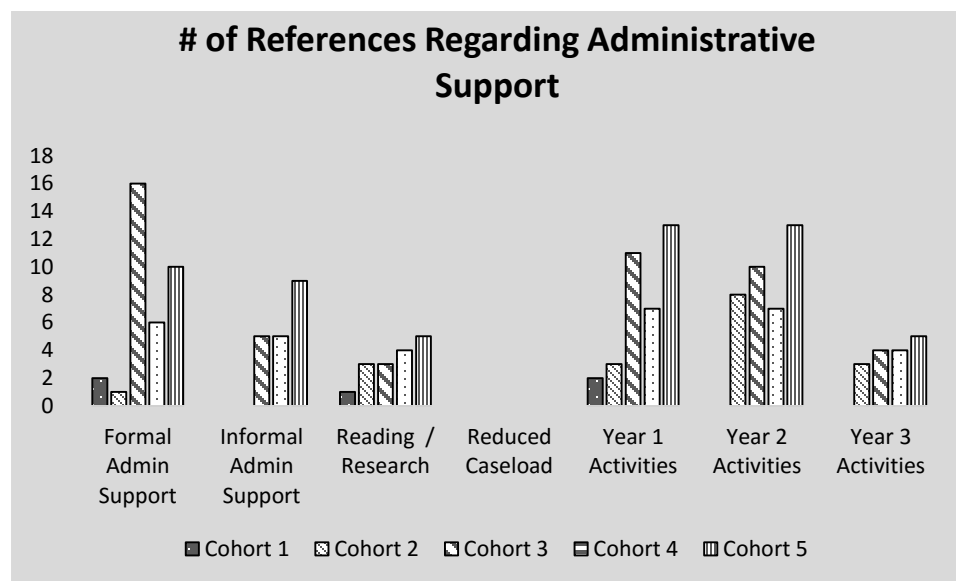
Collaboration, common planning, and participation in an open forum emerged as a theme that corroborated the Phase 1 findings of the influential factors of the Induction Program on teacher self-efficacy. Spanning relationships among inductees, mentors, and administrators, collaborative communication and administrative support was seen as both the strength and weakness of the Induction Program.



**Figure 6. Number of References Regarding Collaboration Made by Cohort One Through Five Inductees**

**Administrative support.** Administrative support at the central administrative level as well as at the building level emerged to the foreground as a key component of the induction program. At both levels, the respondents valued an organized, differentiated approach to supporting inductees. “Administrative support” in Phase 1 data collection of the TSES and rank order survey was not clearly delineated as central administration or building level administration. In Phase 2, however, respondents expressed strong opinions regarding the three-year program. Of the five cohorts, all five described different experiences in year one of induction. While the opening New Teacher Orientation (NTO) days were consistently organized and implemented, the remainder of year one’s activities differed vastly from year to year. Year one of induction experiences yielded some negative sentiments regarding a lack of differentiation, organization, and follow-through.

Figure 7, below, represents the number of references regarding administrative support made by inductees, and is organized according to cohort identification. Using NVIVO Starter, the researcher coded comments referring to both formal and informal administrative support, as well as comments regarding activities or services that were provided by administration.



**Figure 7. Number of References Regarding Administrative Support Made by Cohort One through Five Inductees**

Interviewee 4 commented, “Last year we had year one induction and we would go once a month and have a meeting at the DAO building. Last year was a mess.”

Interviewee 2 remarked,

One of the first meetings was about what administration wanted in lesson plans. They wanted objective, procedure, and assessment. After that we talked about essential questions, which is interesting and great for like maybe one session, but we just kind of talked about it the entire year.

Interviewee 3 had a different memory of first year induction activities:

My first year I went through a series of meetings and workshops after school as part of the Induction Program. I went through probably 6 or 7 monthly meetings

and the topics varied from month-to-month. There was never a continuation of anything. We just got different books that kind of went over certain topics, but we never went back to it the following month. We'd be given material that we could look at but it was never expanded on in the future.

Interviewee 4 remembered the first year this way:

I don't think there was anything in Year One that was really beneficial. The requirement in Year One was just that we get an online course from ----- and completed (*sic*) that and turned in the certificate.

Among the five cohorts, year two yielded the most positive responses regarding the impact of the induction program on new-teacher self-efficacy. Other than miscommunication among central administration regarding the appropriate placement of a new employee in the induction program, respondents identified year two as the year that made the largest contribution to the attainment of their self-efficacy goals. Year two inductees have consistently, per all five cohorts, participated in professional learning communities focused on instructional design elements of student engagement. By design, year two directly addresses two goals of self-efficacy: effectiveness in instructional practices and increasing student engagement. The third goal, though not directly targeted by year two activities, was indirectly addressed with professional development in instructional design enhancing student engagement. Respondents concurred that focusing on the attainment of student engagement had a direct effect on classroom management.

Interviewee 2 recalled more favorably the second year induction program,

This year ----- is the induction person and it's a lot more organized. We've learned about engagement strategies and ways to hold every student accountable. I found that that was really interesting and really valuable for me to learn these different techniques that I had maybe never heard of before. This year I definitely picked up a handful of techniques that I can use in the classroom that give me a better sense of how all of my students are doing, and also just keeps them more engaged with the activity. ---- had some really great anecdotal experiences that --- - could share. One of the things that --- did was for every technique ---- would

say, “This is how you can take it even to a deeper level and make higher level connections,” which really appealed to me because that's what I'm trying to do.

Interviewee 7 addressed classroom management with perceptions about the second year induction program’s emphasis on student engagement, “The engagement strategies cut down on the behavior because you're making sure that each student is accountable. We didn't necessarily talk directly about classroom management techniques.”

Year Three also seemed to be consistently organized among all five cohorts. However, the criteria identifying who actually participated in year three could not be determined. For example, Interviewee 6 remarked, “They basically said, ‘No year three,’ then they forgot about me.” Coincidentally, Interviewee 5 commented, “I didn't do year three induction stuff this year because I was told not to. Now, I'm being told by other people, "Oh maybe you should have." Interviewee 3 concurs, “I honestly right now don't know where I stand for year three. I didn't do any year three stuff. I was grandfathered out or whatever. Somebody else is telling me, "No. Didn't you get that e-mail in October?"

Respondents who did complete year three induction all report that it was a year to implement what was introduced in year two, while achieving a level of independence. Those respondents recall meeting with their building administrator and developing a reflective binder as evidence of practice and growth. Below are some comments that describe the third year induction activities:

- Interviewee 5:

You write a goal for yourself for the year focusing on one of the domains. If you wanted to like (*sic*) make a better classroom environment or something like that, and then you gather data throughout the year like (*sic*), “What's your plan and



how are you going to improve in this area?" Then you sort of present that at the end of the year.

- Interviewee 6:

This is just more like an independent study.

- Interviewee 7:

Then year three was just more like building level. I think we did meet a few times over there, but it was mostly choosing something to work on at the building level, which I did writing workshop. Then I met with -----, my principal, every marking period. It was more of a gradual release of, "Okay, try it on your own now."

The respondents also discussed the value of meeting with the building administrator. Accessibility and commitment to meeting with new teachers seemed particularly impactful and was noteworthy when meetings were cancelled. Interviewee 9 observed,

. . . the building meetings, when there were building meetings, that (*sic*) had to do with things like differentiation. The meetings where there was more interaction among the inductees was focused on, "What are you struggling with, how does this work?" That was the kind of conversation versus being talked to. I think the only other thing is occasionally our building meetings would end up having to be cancelled, the ones that we were having with the administrators here, which was difficult. You'd be waiting to have this moment to ask all these questions and then for whatever reason it might not happen. Those meetings were good in a sense that I think people have building level questions. They have questions about, "What do I do when a student comes in with a late note?" It's very specific to the high school or the elementary school or the middle school. That was helpful for me when we did have those meetings that I was able to ask really specific building level questions.

A final sentiment related to administrative support among the year four and five cohorts was regarding the submission of a final portfolio meant to "showcase instructional artifacts and the application of the competencies of the Induction Program."

(Suburban School District in Southeastern Pennsylvania, 2016. p. 13) Respondents expressed hope that the district would bring consistency to the process of giving feedback to a body of work that required time and effort on the part of an inductee. The following comments were shared regarding the required portfolios:

- Interviewee 2:

Some people sent their binders and they never got their binders back. Rather than having a discussion about it, we had to turn it in knowing that we're not going to see it again and never get any feedback about it.

- Interviewee 3:

I just think it just needs to be looked at and re-evaluated so that people are also getting feedback on what they're turning in. I turned in a portfolio the other day and I got mixed reviews as to what happens with that portfolio.

- Interviewee 9:

I created a portfolio with artifacts based on what I could glean they were asking for. I think it's on my home computer. I printed out and gave it to them but I don't know if I have the physical copy anymore. They may have it still.

While the comments seem to carry a negative sentiment, the message that the inductees seem to convey is a positive one, they welcome constructive feedback.

**Program enhancements.** The respondents' sentiments regarding the program were generally positive. The negative comments within the survey and open-ended responses were however, addressed in the Phase 2 open-ended question asking the interviewee for additional comments. Coded as "Suggested Improvements," there were 54 references from all 9 respondents. The most commonly coded stem word was "differentiate" and it was the recommendation of many interviewees that the district acknowledge the differences among inductees in both experience and position. They believed that sharing the induction experience with others of a similar background would

be more beneficial than the one-size-fits-all induction program. Some respondents shared the following comments:

- Interviewee 1:

I'm in year one. I've been a teacher for fourteen years, but I'm in year one. It's not that I'm arguing the year one, but ...

- Interviewee 4:

I think the induction process might be helpful especially for a first year teacher, talking about classroom management and ... That's something that sometimes I struggle with. I would have to say probably even to a veteran teacher that's coming into the district, I feel like it doesn't necessarily fit what they would need either.

- Interviewee 5:

I was the one standout that didn't fit into any of their molds in more than one way. The other part is meeting in the specific cohort groups with people who match you. If I'm a kindergarten teacher, maybe the K, 1st and 2nd grade people can meet. Then, the 3rd through 5th. I always feel bad for that random art teacher or that random music person that doesn't quite fit, so finding a fit for them as well.

- Interviewee 9:

I just thought maybe as a district we could anticipate better by thinking about what people are coming in with and then maybe (*sic*) what they might need based on that.

In the event that there was not another individual in the cohort with which to share, more appropriate professional development or increased one-to-one time with administration would help the new teachers attain self-efficacy goals.

The second most common recommendation was an increase in the opportunities for an open forum. Wishing to collaborate cross-grade level and cross-department, several cohort members thought that sharing personal experiences among their peers, and with their administrators, would have met more of their needs regarding the attainment of self-efficacy goals. Interviewee 2 offered,

I think having an opportunity for the new teachers to come with their own questions or their own experiences that they've had problems with in sort of like a closed setting, and having a discussion about what you could do, what you could do better would have been helpful. Basically what we're saying in terms of having more time or listening to the opinions of every one of the new teachers, giving them time to meet, that would be the ideal program.

## **Results and Interpretations**

### **Analysis of Quantitative and Qualitative Data**

In analyzing the quantitative data resulting from the administration of the TSES, the researcher was able to determine a level of perceived effectiveness among a representative group of new teachers. The researcher was also able to examine, in order of preference, the most influential components of the induction program on teacher self-efficacy. Face-to-face interviews yielded transcripts, which were coded and analyzed for their ability to clarify and complement the quantitative findings. The following data are presented as it relates to the research sub-questions.

**Research sub-Question #1.** Research sub-question #1 assessed the contributing factors of the induction program on new-teacher self-efficacy as measured by the Teacher Sense of Efficacy Scale (TSES). The participants were asked to assess their self-efficacy as it is influenced by the components of the induction program. The overall self-efficacy of the 29 individuals representing 102 of the most recently hired certificated staff within the past five years was a median score of 7.67 as measured on a 9-point scale (see Table 5, p. 53).

Measuring student engagement on the TSES, questions 2, 3, 4, and 11, present the five cohorts' lowest median score at 7.25. Conversely, measuring instructional practices on the TSES, questions 5, 9, 10, and 12, present the highest median score of 8.0 among

the participants. With a median score of 7.75, self-efficacy in classroom management is measured by questions 1, 6, 7, and 8.

Once the respondents assessed their self-efficacy, they were asked to directly rank, in order of greatest to least influence, the nine key components of the induction program. According to the respondents representing five years of the most recently hired professional staff, the contributing factors in order of influence are:

1. Being assigned a mentor
2. Common planning time with colleagues
3. Administrator support
4. Classroom observations and feedback
5. New-teacher meetings with mentors
6. Professional readings and research
7. Reduced caseload
8. New-teacher meetings without mentors
9. Orientation activities

While the TSES measured self-efficacy, the rank order of components allowed the respondents

to quantify their perceptions of the induction program's influence on that self-efficacy.

**Research sub-question #2.** Research sub-question #2 refers to how inductees describe the attainment of self-efficacy goals of student engagement, instructional practices, and classroom management. Face-to-face interviews revealed that goals were largely attained through mentorship, collaboration, and administrative support. Careful to describe the distinguishing trademarks and benefits of all three years of the induction program, the inductees were equally conscientious about recommending additions or improvements to the program. Attainment of self-efficacy goals would be achieved through differentiation geared toward an inductee's years of experience and assigned position within the district. Additionally, an open forum would enhance the attainment of

such goals. As the newly hired professionals acquire experience in the district, three of the nine inductees expressed the need for dialogue among colleagues in the presence of administration. Likening the induction program to their classroom, the respondents claim that collaboration and open discourse would enhance professional learning and development.

### **Summary**

This study's findings suggest that the district induction plan contributes "quite a bit," to the attainment of the self-efficacy goals of student engagement, instructional practices, and classroom management. Recalling that the survey to measure self-efficacy was based on a nine-point Likert scale, with a score of 1 representing "Nothing" that a teacher can do to influence student engagement, instructional practice, and classroom management. A score of 3 represents "Very Little," a score of 5 represents "Some Influence," a score of 7 represents "Quite a bit," and a score of 9 represents "A Great Deal." The overall score of new-teacher self-efficacy in the study is a median score of 7.67 on the TSES scale and aptly describes the influence of the program on a new teacher's sense of their own effectiveness in the classroom as "Quite a Bit."

Through the formal assignment of a mentor and the informal establishment of collaborative pairings and ongoing administrative support, the representatives of these five cohorts have clearly identified the contributing factors of the induction program on their self-efficacy.

## **Chapter 5: Conclusions and Recommendations**

### **Introduction**

The purpose of this chapter is to summarize the mixed methods study regarding the contributing factors of one district's induction program on new-teacher self-efficacy. After providing an overview of the study, including a discussion of the methodologies used to answer the research questions, the researcher shares drawn conclusions based on the study's findings. As a result of these drawn conclusions, the researcher shares recommendations and actionable solutions for the organization, as well as recommended topics for future study.

This study is based on the assumption that high new-teacher self-efficacy will lead to teacher retention, higher levels of professional goal setting, openness to innovation, and ultimately increased student achievement (Bandura, 1977; Erdem & Demirel, 2007). Within this assumption, the researcher has sought to examine the mechanism by which an organization retains and professionally develops new teachers. In this case, the mechanism that provides orientation, peer and administrative support, and research-based instruction geared to increase teacher effectiveness is the district's induction program, a three-year process for most newly hired professional staff.

Research suggests that an induction program aids in the retention and satisfaction of new teachers, but what is not known is the extent to which it impacts teacher performance and student achievement (Allen, 2013; Feiman-Nemser et al., 1999). This study seeks to examine perceptions of self-efficacy as influenced by the discrete components of the induction program. This study does not seek to evaluate the induction

program itself, rather it addresses the program's contributions to new-teacher self-efficacy.

Located in the suburbs of Philadelphia, Pennsylvania, the study's site is a small public school district with approximately 4,900 students and 320 teaching staff. Over the past five years, approximately 102 licensed staff have been hired for the district's high school, middle school, 3 elementary schools, and a kindergarten center. All individuals have cycled through all, or part of, the state mandated induction program.

The demographic data on the newly hired staff were collected and disaggregated into the year hired, with the newest hires as of August 1, 2015, identified as year one cohort. The pattern continues with each hiring year identified as a particular cohort.

**Table 11**  
*Demographic Data: Number of Survey Respondents Out of Number Hired in a Given Year.*

<b>Date of Hire</b>	<b>Cohort</b>	<b># Respondents/ # Hired</b>
08/01/11 to 07/31/12	Year Five	3/7
08/01/12 to 07/31/13	Year Four	4/10
08/01/13 to 07/31/14	Year Three	10/22
08/01/14 to 07/31/15	Year Two	10/21
08/01/15 to 6/1/16	Year One	12/42

All cohorts were invited to respond to a 12-item survey regarding their perceptions of their efficacy in student engagement, instructional practices, and classroom management, as influenced by the induction program. The respondents were further invited to rank, in order of influence greatest to least, the nine components of the



induction program. Finally, all were invited to participate in face-to-face follow-up interviews, of which the first two respondents were chosen as interviewees from each cohort.

The researcher not only hoped to discover the most influential components of the induction program on their self-efficacy, but also to learn about how new teachers attain self-efficacy goals. Research supports this approach in bodies of work regarding an organization's induction efforts to maintain enthusiasm among new teachers and to enhance their identities as effective teachers (Beltman et al., 2015). Research also acknowledges the importance of school culture and climate in attaining and maintaining a teacher's sense of efficacy. If well-prepared, effective teachers have the largest impact on learning (Jurasaitė-Harbison & Rex, 2010; Tschannen-Moran & Johnson, 2011; Van Houtte & Van Maele, 2011), then what part does the district's induction program play in this process?

The findings are based on the scores of the TSES, the rank order results of the survey and the coded responses of the personal interviews. The conclusions answer the central research question and the two sub-questions:

How does the district induction program contribute to the self-efficacy of new teachers, years one through five?

1. How does the district induction program contribute to new-teacher self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) as measured by the Teacher Sense of Efficacy Scale?

2. How do new-teachers describe their attainment of self-efficacy goals (i.e., student engagement, instructional practices, and classroom management) from the district induction program?

The researcher's conclusions were framed by both research covered in the literature review in Chapter 2 and data collection detailed in Chapter 4. The literature review, the quantitative and qualitative data analysis, and the researcher's knowledge of the infrastructure of the induction program helped to create an overview of how the induction program is affecting new-teacher sense of efficacy. This pragmatic stance allowed the researcher to conduct a study that gave equal value to objective data collection through a survey and to subjective, lived experiences through interviews with the inductees (Creswell & Plano Clark, 2011).

This was a mixed methods study, including quantitative data collection through an online survey and qualitative data collection through personal interviews. The TSES survey, developed by Tschannen-Moran and Woolfolk Hoy, was distributed electronically to all professional staff hired since August 1, 2011. Included with the survey was the solicitation of demographic information and a request to rank order the nine components of the induction program based on staff perceptions of induction program influence on teacher self-efficacy.

The quantitative data collected in the spring of 2016 were analyzed using both EXCEL and IBM SPSS software. The data were disaggregated according to cohort, years licensed, overall self-efficacy, and the self-efficacy goals of student engagement, instructional practices and classroom management. The qualitative data were also collected in the spring of 2016 following the close of the survey. Using *rev. com*, an

online transcription service, and NVIVO Starter, a qualitative data analysis software, interviews were transcribed and coded to determine patterns and themes that would address the research question and sub-questions.

### **Conclusions**

As new teachers self-assessed their beliefs about how much control they had over student engagement, instructional practices, and classroom management, they were tasked with an additional challenge of assessing how influential was the induction program on these beliefs. Tschannen-Moran and Woolfolk Hoy originally asked, “What structural features and supports make a difference in the formation of efficacy beliefs?” (Tschannen-Moran & Hoy, 2001; Tschannen-Moran & Johnson, 2011) The results of this study have shown that the induction program has contributed to an overall self-efficacy of 7.67 out of a 9-point scale, but a clearer picture of the data emerges when the data are disaggregated according to efficacy goals. The data show that new-teachers believe that they are most effective in instructional practices and least effective in the area of student engagement. These disaggregated data carry interpretations still in the high range, but are implicitly interpreted as top of the high range, middle of the high range and bottom of the high range.

At first glance, this appears to be a conflicting result with what was reported in the qualitative data in Phase 2. Respondents consistently reported that work in year 2 of the induction program was beneficial to their overall classroom practice. Focusing on student engagement with research-based strategies and resources, teachers report that year 2 professional development increased their effectiveness in both student engagement

and classroom management. What accounts for the discrepancy? Upon further analysis, the consistently low scoring question was, “How much can you assist families in helping their children do well in school?” (Tschannen-Moran & Hoy, 2001) This question reflects work to be done with new teachers. The researcher speculates that their efforts toward family engagement, as new teachers, may not yet have taken root, hence the consistently low score. No significant differences exist among the cohorts for any of the other goals.

Knowing that self-efficacy regarding instructional practices was the highest score, the researcher was led to the question, “What induction practice or practices influenced new teacher efficacy in instructional practices?” The answer lies in the rank order on influential components of the induction program. Ranking at the top of the list of nine components was mentorship and common planning time with colleagues. In four out of five cohorts, respondents ranked mentorship as the most influential element of the induction program. Second in rank is common planning time with colleagues. The qualitative data firmly support this sentiment. Interviewees felt strongly that mentorship and collaboration, especially in the area of curriculum and instructional practice were essential parts of the program. Several comments directly suggest that more time be allotted for collegial sharing.

What do the data continue to say? The data appear to report that orientation activities, new-teacher meeting without mentors, reduced case load, professional reading, and research are perceived to have little influence on a new-teacher’s self-efficacy. This is not to say that these program elements are dispensable. For example, orientation

activities are a necessary introduction to the district. Consequently, it is reasonable to interpret that a particular induction activity may be essential to the program, but may not be a contributing factor to self-efficacy. Strong and Ingersoll would add that the extent to which an induction program affects teaching practice is still unknown (R. M. Ingersoll & Strong, 2011; Strong, 2009).

Administrative support, and reciprocal observations and feedback first appeared moderately influential on teacher efficacy in both the quantitative and qualitative analysis. Upon further scrutiny of administrative support in the qualitative analysis however, it became clear that the respondents significantly valued support from both the central and building level administration. What the researcher had intended as general administrative support was interpreted differently by the respondents. They perceived, and held accountable, all district administration for the development, delivery, and local support of the induction program and its inductees.

Inductees looked to central administration for clear guidance regarding participation in, and completion of, the induction program. They further articulated that it would have been beneficial to them if their induction experience had been differentiated to meet their needs in a manner that modeled an effective teaching practice. As participants, they wanted their voices to be heard and recommended participation in an open forum and were open to constructive feedback on their practice and performance. They expressed disappointment that portfolios and induction binders, created as evidence of their reflection and growth, were left unacknowledged at the conclusion of year 3.

Still others, valued support from the building administrators. Eight of the nine interviewees said that they appreciated administrators who honored and kept their commitments to meeting times and expressed disappointment when building meetings did not occur. Three of the newer inductees were grateful to those administrators who created a non-threatening place in which to ask questions and seek important information that might otherwise seem like minutia. Six inductees recommended that more common planning time with mentors, and among colleagues, be “carved out” by the administration to ensure more collaboration and feedback among professional peers. The feedback of the interviewees is reflective of the turnovers of program facilitators. Only the year two program leader and building level administration was in place during the past five-year period during which the subjects cycled through, or are cycling through, the three-year induction program.

In answering the central research question and the two sub-questions, the respondents, representing new teachers, suggest that mentorship, common planning or collaboration, and administrative support are the factors that contribute to the self-efficacy of new teachers, years one through five. Assessing self-efficacy with the TSES indicated that new teachers have a relatively high sense of efficacy. The attainment of the self-efficacy goals is met through specific induction program components such as mentor assignment; however, common planning and opportunities for collaboration occur at the hands of the building administrator. At the building level, school scheduling that respects collegiality results in new teachers who feel more effective.

## **Recommendations**

### **Recommendations for the Organization**

This study is an examination of new-teacher perceptions and as such, is not intended to be an evaluation of the induction program. The findings and interpretation of the data suggest that the induction program does contribute to the self-efficacy of new teachers. This study in southeastern Pennsylvania adds to the body of research that asks Tschannen-Moran and Woolfolk Hoy's original question, "What structural features and supports make a difference in the formation of efficacy beliefs?" (Tschannen-Moran & Hoy, 2001)

In using the results of this study to inform practice, the following recommendations are as follows:

- Acknowledge the significance of the program facilitator by entrusting the induction program to an individual who is committed to the professional development and retention of effective teachers;
- Develop and consistently use clear criteria for deciding who will participate in the induction program and for what length of time;
- Administer a needs assessment that will place the inductee in the appropriate professional development according to experience and position;
- Continue to use research-based resources for years one and two and adapt the resources to meet the inductees' needs;

- Model the induction program presentations after effective teaching practices; and
- Use the Induction Program and new-teacher passion for collaboration in carrying out a vision for renewed professional development among all practitioners.

Interviewees readily articulated their appreciation for mentorship and collaboration, and those responses accentuated the need for a consistently implemented induction program, centrally located and applicable to all inductees. The program and its components are already in place, and ideally, ready to put into practice.

### **Recommendations for Future Study**

Research on self-efficacy and new-teacher induction have not yielded definitive answers regarding what external practices of induction affect teacher efficacy. Such is the case with this study, as new teachers were asked about their perceptions of the contributing factors of the induction program. Research exists that verifies the value of an effective induction program (Allen, 2013; Feiman-Nemser et al., 1999; R. M. Ingersoll & Strong, 2011; R. M. Ingersoll, 2012) and this study is based on the assumption that this particular district's induction has some impact on self-efficacy. A lack of empirical studies, inconclusive measures of teacher effectiveness, and the unreliability of self-reporting (Strong, 2009) all contribute to the challenge of researching teacher effectiveness as it is impacted by induction.

The recommendations for future study are as follows:



- Comparison of the effects of formal and informal induction activities on new teacher efficacy;
- Comparison of the effects on new teacher efficacy regarding trained and untrained mentors in the skill of coaching adult learners;
- An analysis of mentorship activities, attitudes, and reciprocal observations;
- An examination and analysis of time and use of resource among mentors and inductees; and
- Continued research on the impact of teacher induction on student achievement.

Continued research on the external factors affecting self-efficacy and the discovery of reliable and valid methods to measure teacher effectiveness will continue to inform districts on how to retain and foster effective teachers.

### **Summary**

This study examined teachers' sense of effectiveness as a result of having participated in a district's induction program. While the teachers' self-reported self-efficacy was high, it was important to gather information on a dissected view of the components affecting the self-efficacy. The application of these findings and the results of this study will aid districts in creating induction programs that meet the needs of all new professional staff. When organized and delivered in a systematic and consistent way by a committed facilitator, the induction program has the capacity to affect positive change among the newest members of the workforce. Benefitting from well-selected mentorship, regular opportunities for collaboration, and administrative support, the inductee's strengthened self-efficacy may directly and swiftly benefit student achievement.

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## Appendix A: Letter of Approval

### PHOENIXVILLE AREA SCHOOL DISTRICT

DISTRICT ADMINISTRATION OFFICE  
 386 CITY LINE AVENUE  
 PHOENIXVILLE, PA 19460  
 484-927-5000  
 FAX 610-933-3189  
 BUSINESS OFFICE FAX  
 610-933-3707

March 7, 2016

Drexel University  
 Graduate Studies Office  
 3141 Chestnut Street  
 Philadelphia, PA 19104

RE: Doctoral Candidate Research Study - Catherine Renzulli  
**Exploring Induction: An Examination of New-Teacher Perceptions Regarding the Effective Characteristics of the Induction Program in a Suburban School District in Southeastern Pennsylvania.**

Dear Members of the Committee:

On behalf of the Phoenixville Area School District, I am writing to formally indicate our awareness of the research proposed by Mrs. Catherine Renzulli, a student at Drexel University. We are aware that Mrs. Renzulli intends to conduct her research by gathering data and doing face-to-face interviews with ten (10) volunteers from staff hired between August 2011 and September 2015. Her study is entitled: *Exploring Induction: An Examination of New-Teacher Perceptions Regarding the Effective Characteristics of the Induction Program in a Suburban School District in Southeastern Pennsylvania.*

The Board of School Directors formally approved this research study at its February 18, 2016, 2013 School Board Meeting. Mrs. Renzulli has been given approval to conduct her research in our school district.

If you have any questions or concerns, please feel free to contact my office at 484-927-5010.

Sincerely,

Alan D. Fegley, Ed.D.  
 Superintendent of Schools  
 Phoenixville Area School District

ADF/ldf

## Appendix B: Survey

This survey, created by researchers at the Ohio State University, measures a level of self-efficacy. That is, it measures your belief in your ability to control behaviors in your classroom regarding student engagement, instructional practices and classroom management. All responses are anonymous and information collected will remain confidential and shared only within the scope of the research.

1. In June 2016, you will have held a certificate or license

- 1 school year or less
- 2 school years
- 3 school years
- 4 school years
- 5 school years

2. In June, 2016 you will have been employed by the district

- 1 school year or less
- 2 school years
- 3 school years
- 4 school years
- 5 school years

I am willing to participate in a face-to-face interview.

- Yes
- No

If yes, please give your name : \_\_\_\_\_ . You will be contacted by email.

**Thank you for participating in this survey. If at any time, you wish to exit the survey, please feel free to do so.**

**Please answer the survey questions with an Induction Program focus.**

	Nothing	Very Little	Some Influence	Quite a Bit	A Great Deal
3. How much can you do to control disruptive behavior in the classroom?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How much can you do to motivate students who show low interest in school work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. How much can you do to get students to believe they can do well in school work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. How much can you do to help your students value learning?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. To what extent can you craft good questions for your students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. How much can you do to get children to follow classroom rules?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. How much can you do to calm a student who is disruptive or noisy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. How well can you establish a classroom management system with each group of students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. How much can you use a variety of assessment strategies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Influences on Self-Efficacy

Rank the items as you perceive them to influence your effectiveness in doing your job. One is the most influential and 9 is the least influential.

15. How influential is . . .

<input type="text"/>	being assigned a mentor
<input type="text"/>	common planning time with colleagues
<input type="text"/>	administrator support
<input type="text"/>	reduced case load
<input type="text"/>	classroom observations and feedback
<input type="text"/>	orientation activities
<input type="text"/>	professional reading and research
<input type="text"/>	new-teacher meetings with mentors
<input type="text"/>	new-teacher meetings without mentors

### Appendix C: Sample Letter of Informed Consent

Dear Participant,

The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with this school, the researcher, or the Phoenixville Area School District.

The purpose of this study is to examine how the Induction Program impacts teacher self-efficacy. The mixed methods approach includes a survey, already administered, and follow-up interviews. The information gathered from the survey will help generate relevant open-ended interview questions. The interviews will be recorded so they can be later transcribed to look for common themes among all participants.

Do not hesitate to ask any questions about the study either before participating or during the time that you are participating. I would be happy to share my findings with you after the research is completed. However, your name will not be associated with the research findings in anyway, and only the researcher will know your identity as a participant.

There are no known risks and/or discomfort associated with the study. The expected benefits associated with your participation are for you to have an opportunity to share about the experiences with the induction program as it relates to your sense of effectiveness in the classroom. Additionally, your involvement in this doctoral research study contributes to the future welfare of new teachers to the district.

Please sign your consent with full knowledge of the nature and purpose of the procedures. A copy of this consent form will be given to you to keep.

Date: \_\_\_\_\_

Signature of the participant: \_\_\_\_\_

Catherine L. Renzulli

Drexel University

(Adapted from Creswell, 2013)

## Appendix D: Interview Questions

Interview Protocol: Exploring Induction: An Examination of New-Teacher Perceptions Regarding the Effective Characteristics of the Induction Program

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

Position of Interviewee:

Length of time employed by the district:

The participants in this interview process have completed an online survey regarding teacher sense of efficacy. The answers to the following questions serve as explanatory data for teachers' perceptions of the effective characteristics of the induction program.

Questions:

1. Describe your first year experiences in the induction program.
2. (If applicable) Compare and contrast with Year One, your subsequent experiences in years two and three.
3. Reflecting on your Induction Program, which Induction activities do you perceive contributed to your self-efficacy with regard to student engagement? With regard to instructional practices? With classroom management?
4. What additions do you think would enhance the Induction Program in developing teacher self-efficacy?
5. Is there anything that you would like to add regarding the Induction program?

Thank you for answering these questions. Be assured that your participation is unrelated to job status or job performance evaluations. All information will be considered privileged and confidential and will not be shared beyond the scope of the research.